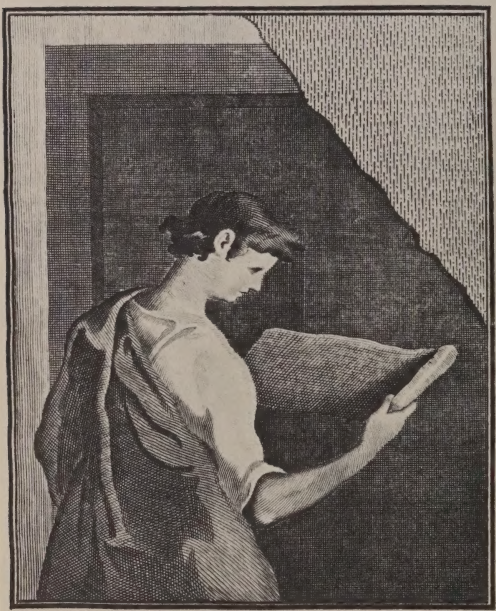

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Joseph Clark Hoppin

1870–1925

Joseph Clark Hoppin was born in Providence, Rhode Island, May 23, 1870, and died after a long illness in Boston, Massachusetts, January 30, 1925. After his graduation from Harvard in 1893 he studied at Munich, Berlin, and the American School of Classical Studies at Athens, and obtained the degree of Ph.D. at Munich in 1896. In 1896–97 and again in 1897–98 he spent several months in Athens preparing for publication the great collection of vases from the Argive Heraeum, which he had helped to explore in 1894 and 1895.

He returned to America in 1898 and, after a year as instructor in Greek Archaeology at Wellesley College, was called to Bryn Mawr as Associate in Greek Art and Archaeology. In 1901 he was appointed Associate Professor of Greek Art and Archaeology and held this position until 1904, when he resigned. After this he devoted himself for the most part to research and writing, although in 1904–05 he served as Professor of the Greek Language and Literature in the American School at Athens and later, during the Great War, again taught at Bryn Mawr as Professor of Classical Archaeology in 1917–19. In 1910 and 1911 he was a member of the expedition which, under the lead of his friend, Richard Norton, conducted excavations at Cyrene.

From the very beginning of his career, Hoppin was attracted to the Greek vases, and his published work was largely devoted to his chosen field. His doctor's dissertation *Euthymides* was issued in 1896. In 1905 his chapter in the second volume of Waldstein's *Argive Heraeum* showed at once his command of the whole field of Greek ceramics and his independence and originality in discussing the many unsolved problems of this fascinating branch of archaeology. His *Euthymides and His Fellows*, published in 1916, is a revised and enlarged edition of his doctor's dissertation. In 1918 he brought out *A Handbook of Attic Red-Figured Vases* in two volumes and followed this in 1924 by *A Handbook of Greek Black-Figured Vases*. Both of these books are of the utmost value to the specialist and represent a vast amount of research and careful sifting of evidence. His last work was the preparation for publication, in collaboration with Mr. Albert Gallatin, of the vases in his own collection and in that of Mr. Gallatin. Besides these larger works he contributed numerous articles to The American Journal of Archaeology and other periodicals. He was a Fellow of the American Academy of Arts and Sciences and of the Royal Geographical Society and a member of numerous archaeological societies.

Such is the bare outline of a life of fruitful activity. It gives little idea of the many-sidedness of the man himself, of his manifold interests, his generosity and great capacity for friendship. He numbered among his friends most of the classical archaeologists of his generation and many older and younger scholars as well. To all of these his death brings a sense of irreparable loss, and the courage and indomitable will with which he continued to work through years of painful illness will always be an inspiration.

G. H. C.

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NOTES ON PAYMENTS MADE BY THE TREASURERS OF ATHENA IN 416–5 B.C.

PLATE I

DURING the spring of 415 Athens was eagerly preparing for the great Sicilian adventure. To make the fleet and its equipment as impressive and effective as possible, trierarchs vied with one another for the honor of having the most perfectly appointed trireme and the best trained crew, while the state, drawing liberally upon its treasures, provided the generals in command with every advantage that money could buy. Athens was proud of her strength, so visibly manifest in the glorious fleet soon to set sail for the conquest of Sicily.[1]

We are fortunate in possessing a piece of Pentelic marble [2] bearing silent witness to the spirit of enthusiasm with which Athens was filled on the eve of the fleet's departure. This piece of stone was once a part of the treasury accounts of the Goddess Athena, and on it were recorded the payments made by the Treasurers of the Goddess to Alcibiades and his colleagues just before they set sail. Although the inscription is fragmentary and difficult to reconstruct, it is more than ordinarily interesting because of its connection with the very dramatic Sicilian episode in Athenian history.

Chiefly on account of its connection with this episode, I thought it worth while, several years ago, to see whether the inscription could be restored, especially as previous editors, erring in their very sketchy tentative essays to fill in the gaps, had themselves left blanks that could be filled with comparative ease. When the first gaps were filled, the problem became much more difficult because of chronological uncertainties. After numerous efforts to reconcile the inscription with the generally accepted scheme of Greek chro-

[1] Thuc., vi, 31.

[2] Hicks and Hill, *Greek Historical Inscriptions*, No. 70; Dittenberger, *Sylloge* [3] 94, lines 35–50; *I.G.* I, 180–183, frg. *e*. Frg. *c* contains the end of the accounts of the previous year, 417–6, numbered 181 in *I.G.* I, together with parts of the three first lines of the accounts of 416–5, *I.G.* I, 182. On frg. *e* is found a part of the accounts of 415–4, *I.G.* I, 183. The inscription is written *στοιχηδόν*. In numbering the lines I shall follow the last edition of Dittenberger. Since the restorations made in lines 35 and 36 by previous editors are almost certain, even though the name of the secretary is unknown, it is evident that there were either 84 or 85 letters in a line. If there were 84 letters in a line we must omit the *h* of *hoĩs* in line 36, as Dittenberger does, and then we must make a minor correction in Dittenberger's division between lines 36 and 37. The *nu* of Βατε̃θεν becomes the first letter of line 37. Although absolute certainty is impossible, the difficulty of finding satisfactory restorations for the rest of the inscription if its lines contained 85 letters has convinced me that 84 is the correct number. It is more difficult to ascertain the margin of frg. *e* in no. 182, but I have concluded that the margin given by Dittenberger is correct. In passing, it should be noted that the bracket before the *iota* of *Δεχσίθεος* in line 36 of Dittenberger is a misprint. For a copy of the inscription, see plate opposite p. 15 *infra*.

nology found in the works of such men as Busolt, Meyer, and Dittenberger, I became sceptical of their precision. Further study justified my scepticism, and I shall show in this paper how very weak their position has been.

As for the inscription itself, while absolute certainty is impossible, I think it extremely probable that it recorded four payments to the Sicilian generals made sometime between Thargelion 27 and Skirophorion 14, in the tenth prytany, beginning about two weeks after the mutilation of the Hermae. Furthermore, the Antimachus, whose name appears three times in the last few lines, was not a general but the assessor (*πάρεδρος*) of the expedition.

Editors of this inscription have assumed that Antimachus was a general, a colleague of Alcibiades, Nicias, and Lamachus.[1] Beloch alone has recognized that neither the position of the name on the stone nor Thucydides' detailed account of the events leading up to the expedition warrants such an assumption.[2] Beloch, however, does not venture to suggest any theory as to the nature of Antimachus' connection with the generals.

In the treasury accounts of the Goddess there are frequent references to assessors (*πάρεδροι*).[3] In most cases the *πάρεδροι* are clearly deputies or assistants of the Hellenotamiai, for they are named with the latter, sometimes as a board, sometimes as individuals. At times there is no specific mention of assessors at all, although it is probable they are included in the expression *συνάρχοντες*.[4] When an individual Hellenotamias receipted for money to be transferred to generals away from Athens on some expedition, one assessor apparently shared responsibility with him.[5]

Again, when money was paid to generals before their departure, on two occasions at least, a *πάρεδρος* joined with the generals in releasing the treasurers from all responsibility for such sums.[6] It may be that he accompanied the expedition as a representative of the Hellenotamiai, with the duties of treasurer or accountant, or perhaps his work was confined to accounting for money spent by the generals before the fleet sailed. It is possible too that his official position was *πάρεδρος* of the strategic board, or even assistant to some individual general, as Dittenberger's index suggests.[7] But as the strategic *πάρεδρος* appears nowhere else in ancient records, while the assessors of the Hellenotamiai are well known from the treasury accounts of the Goddess, I am reluctant to make a distinc-

[1] See Hill's article in Pauly-Wissowa, suppl. I, 91, *s.v.* Antimachos; Busolt, *Gr. Gesch.* III, 2, 1277, note 1; Krause, *Attische Strategenlisten*, 11, and note.

[2] Beloch, *Gr. Gesch.*[2] II, 2, 265.

[3] See accounts for the years 418–414, 410–09, and 407–6, Dittenberger, *Syll.*[3] 94, 109.

[4] *Ibid.*, 109 *a*, *passim*.

[5] *Ibid.*, 94, lines 67–69; 109 *a*, line 21.

[6] *Ibid.*, 94, lines 40, 52.

[7] *Syll.*[2]

tion between the πάρεδροι of this group of inscriptions.[1] Still it must be admitted that the fragmentary nature of our records and the varying formulas [2] used from year to year make it impossible to be sure that the uncertainties and suspicions of the summer of 415 did not result in the creation of a new official, the strategic πάρεδρος, whose duties were to check the full powers hastily granted to the generals before the mutilation of the Hermae and the accusations against Alcibiades, and to safeguard the public interests and the public funds. On the other hand, a responsible official connected with the Hellenotamiai would have provided an equally effective guaranty that the generals would use the funds at their disposal in a proper manner.

Whatever the duties of the assessor may have been and to whatever office he may have been attached, we know from line 40 of our inscription that one of them was associated with Nicias in the year 416–5. We also know that Antimachus was somehow connected with the Sicilian expedition, and putting the two together we may begin our task of reconstruction by tentatively filling in the end of line 40 and the beginning of line 41 as follows: παρέδροι Ἀντιμάχοι Hερμείοι. Before Ἀντιμάχοι in lines 43, 45, and 47, we also supply the words taken from line 40, καὶ παρέδροι.

We must now attempt to fill the blank between the name of Lamachus in line 42 [3] and the words supplied in line 43. Our first move is to take Νικίαι Νικεράτο Κυδαντίδει from line 40 where the words occur before καὶ παρέδροι and to place it in the same position in line 43. There is now a blank of ten letters, but in it we should expect to find either Lamachus' demotic or the name of his father. As Χσενοφάνος exactly fills the gap, I think we need not hesitate to restore the end of lines 42, 44, and 46 and the beginning of lines 43, 45, and 47 as follows: Λαμάχοι Χσενοφάνος Νικίαι Νικεράτο Κυδαντίδει καὶ παρέδροι Ἀντιμάχοι, even though the omission of the demotic is unusual when the father's name is given.[4]

[1] It is true that other officials had assistants called πάρεδροι, *e.g.*, the archons, at least in the fourth century, and the *euthynoi* even as early as the fifth. Gilbert, *Constitutional Antiquities* (London, 1895), pp. 225, 228. These assessors were the personal assistants of individual officials, each *euthynos*, for example, having two. But the assessors we are considering are apparently attached to the expedition as a whole, not to one of the generals. To me this is a further indication that we are dealing not with personal assistants of the generals, but with an official connected with the Hellenotamiai, on detached service.

[2] In the accounts of 417–6 there is apparently no reference to an assessor, an omission that cannot be accounted for entirely by the fragmentary nature of the records. In the accounts of 410–09, there is only one direct mention of an assessor, although there are frequent indirect references, if we are right in thinking that the συνάρχοντες included the assessors.

[3] The name of Lamachus is in the same place in lines 42, 44, and 46. In lines 42 and 46 it lacks the final *iota*. Likewise Ἀντιμάχοι occurs in exactly the same position in lines 43, 45, and 47, so that a restoration that fits one place fits all.

[4] But, as can be seen from our inscription, there was no general rule about names. The name of Alcibiades occurs three times without either demotic or father's name, and Antimachus has only a demotic. It should be noted here that, if the

Since the beginnings of lines 42, 44, and 46 must have contained the dates of payment, each one of them being different, it is a much more difficult matter to find satisfactory readings for this part of the lines. We do know that the number of letters to be supplied before *στρατεγοῖς* is 47 and that the last word ended in *αι*, at least in line 46. Editors have assumed the *αι* to be the final letters of *hεμέραι*, and that at first seemed probable,[1] but their other assumption that the lines began with the usual formula, *ἐπὶ τε̃ς Αἰγεῖδος πρότες πρυτανευόσες τρίτει τε̃ς πρυτανείας*, is untenable, for in its shortest possible form, as above, the formula contains 51 letters without *hεμέραι*.[2] Furthermore I know of no instance where *hεμέραι* comes after the phrase *τε̃ς πρυτανείας* in this or any other similar formula. We must therefore seek another formula that will fit our needs, for it seems clear from the three gaps of exactly the same length where the ordinary formula will not go that the shortened formula was not due to an accidental omission of a word.[3]

Assuming then that we are dealing with an intentional variation, not a stone-cutter's mistake, we may well ask what was its purpose. One thinks first of the possibility that the inscription was too long for the stone, but a glance, however hasty, will show that there was enough of the stone left for the accounts of the following year.[4] Since the stone itself offers no explanation, we must look for it elsewhere. The explanation I think is found in a similar and more drastic abbreviation in the accounts for the year 410–09. For all of the payments of a given prytany one heading suffices. This heading naturally precedes the record of the first payment of the prytany, and in it is given the name and number of the prytanizing tribe. For the other payments of the same prytany, it was enough to give the date of payment.[5] We may then consider the possibility that the last four payments were made in one prytany and that the name and number of the prytany were probably given once for all in line 39. As we shall see later, this hypothesis makes possible a partial

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lines of the inscription contain 85, not 84, letters, the name Χσενοφάνος will be one letter too short to fill the gap. As I know of no way to fill the blank of 11 letters except by the demotic Ἐπικεφισίοι, I have concluded that the number 84 is correct. See also note 2, p. 3, *supra*. Ἐπικεφίσιcs is the only demotic of the tribe Oeneis that gives us the right number of letters. But it is generally thought that Lamachus belonged to the deme Oe, Wilamowitz, *Arist.* II, 171 ff.; Kirchner, *Prosop. Att.* 8981.

[1] But in the end I was forced to reject even this assumption. See pp. 7 ff. *infra*. For another possibility, see p. 15.

[2] The stone shows no traces of lettering in the blank spaces of the preceding lines. That makes it impossible to begin the formula anywhere except at the beginning of a line.

[3] We might shorten the formula in several ways, by omitting the words *τε̃ς πρυτανείας*, *πρυτανευόσες*, or the name of the prytanizing tribe, or even two or more of these together, but for none of these omissions have I found a satisfactory parallel.

[4] There are also blank spaces at the end of lines 41, 43, and 45 long enough to have allowed the longer formula to be used.

[5] Dittenberger, *Syll.*[3] 109, lines 14 ff.

reconstruction of lines 39 and 40 and serves to explain why they are so different from those which we are discussing.

There is a further reason for thinking that all of these payments were made in one prytany. Usually money was given to the generals in charge of an expedition just before they were ready to depart. In case several payments were made for one expedition, they fell within a short space of time, as happened in 414 when funds and reinforcements were sent to Sicily. The two payments made at this time were seven days apart.[1]

We must now try to fill in the blanks in lines 42, 44, and 46. It is not sufficient to give merely the day of the prytany, for even in its longest possible form, *δευτέραι καὶ τριακοστει̃ hεμέραι τε̃ς πρυτανείας*, it is much too short.[2] Furthermore, without doing violence to the formula as it is found, we cannot end the formula with a word whose final letters are *αι*. The word *hεμέραι* never follows *τε̃ς πρυτανείας*, nor would it be possible to end the formula with *δευτέραι*. Likewise the words *τε̃ς πρυτανείας* were always a part of the formula, even though it involved a repetition of the phrase.[3] Thus the abbreviated formula, like the longer one, cannot end with *αι*. It will be better to follow the example of the accounts for 410–9 and begin the line . . . *τει (hεμέραι) τε̃ς πρυτανείας*. That leaves between twelve and thirty spaces vacant to be filled in some way. Turning now to the accounts of 407–6, also to *I.G.* I, 274, we find that a double system of dating was sometimes used, by day of prytany and day of month. This is a particularly valuable discovery for us, since it enables us to find a formula ending in *αι* for line 46. There are four possibilities, *δευτέραι, νουμενίαι, διχομενίαι*, and *hένει καὶ νέαι*.

[1] Dittenberger, *Syll.* [3] 94, lines 63 ff. See also *I.G.* I, suppl. pp. 159 ff., no. 179 *a*, for another parallel. Cf. West, *Class. Phil.* x. p. 39.

[2] The formula might be revised to read *ἐπὶ τε̃ς αὐτε̃ς πρυτανείας δευτέραι καὶ εἰκοστει̃ hεμέραι*. This would fill the gap exactly, and it could be used with a line of 85 letters if we vary the margin slightly and end lines 42, 44, and 46 with the first epsilon of *'Επικεφισίοι*. See note 4, p. 5, *supra*. It would also have a partial parallel in *τει̃ αὐτει̃ hεμέραι* of line 69 and Dittenberger, *Syll.*[3] 109, line 23. Other days are possible besides the 22nd, *viz.*, the 24th, 27th, 31st, 33rd, and 36th, so that the same formula by varying the days would serve for the gaps in three lines. We can even restore line 39 on this basis, *ἐπὶ τε̃ς Hιπποθοντίδος ἐνάτες πρυτανευόσες παρέδομεν hεμέραι τετάρ]τε[ι καὶ δεκάτει τε̃ς πρυτανείας*. That would give us the possibility of four payments during the ninth prytany between the 14th and 36th days, in Thargelion 415 just about the time of the mutilation of the Hermae, when the fleet was completing its preparations for departure. Or we can transfer the payments to the tenth prytany by substituting for *ἐνάτες* and *τετάρτει* respectively *δεκάτες* and *πέμπτει*. The last payment would then fall at the earliest on the 27th day of the prytany, about Skirophorion 20. This is probably too late, for it is likely that the fleet had left Athens a few days before. The dates for the ninth prytany are only a little better, for we should expect a final payment just before the fleet sailed in the first half of Skirophorion. The last possible date for a payment in the ninth prytany is Thargelion 24. Thus there would have been an interval of between two and three weeks between the last payment and the departure of the fleet. But the chief objection to a restoration on this basis is the lack of any exact parallel for the formula *ἐπὶ τε̃ς αὐτε̃ς πρυτανείας* and the omission of *τε̃ς πρυτανείας* after the number.

[3] Dittenberger, *Syll.*[3] 94, lines 10 ff.; 109 *b*, lines 41 ff.

Before going further with our restoration, we must turn our attention to chronology. Attic chronology is extremely complicated because months and prytanies did not correspond, and it is at best difficult to determine the end of a calendar year. This much seems to be certain, that the fleet was almost ready to sail when the Hermae were mutilated, that it did sail anywhere from two to five weeks later, and that the mutilation of the Hermae occurred about the middle of the month Thargelion, or approximately forty-five days before the end of the calendar year.[1]

If the year of the Boule corresponds with the calendar year, the mutilation came a week or ten days before the end of the ninth prytany. In that case the fleet sailed some time between the fifth and the twenty-fifth of the tenth prytany and most, if not all, of the payments for the expedition would likewise fall within these limits. We must now try to determine the calendar date for the first day of the prytany or the prytany date for the first of Skirophorion, for, as we have seen, the four calendar dates that might end in *αι* come at the very end, the beginning, or the middle of a month, *hένει καὶ νέαι, νουμενίαι, δευτέραι,* and *διχομενίαι.* As the year 416–5 was probably an ordinary year, we must assign Skirophorion 1 to the sixth or seventh day of the tenth prytany, depending upon whether the prytany contained thirty-five or thirty-six days.[2]

But Keil has expounded the ingenious theory that the Boule did not normally enter upon its duties with the archons and other officials on Hekatombaion 1, the first day of the Athenian year.[3] According to the definitive form of this theory, accepted without question by many scholars,[4] the Boule for the year 416-5 should have left office on Skirophorion 18; but as this date for the change of Boule does not agree with calculations made by Keil in working out his theory, he concluded that the mutilation of the Hermae so disturbed the normal procedure of the Athenian government that through a special arrangement the Boule of 415-4 entered office about the first of Skirophorion.

Since Keil's theories have met with very little criticism,[5] they must be considered here. At first, I tried to restore the blanks in our inscription on the supposition that Keil was right and that the tenth prytany of 416-5 began about Thargelion 13, or that the first pry-

[1] Busolt, *Gr. Gesch.* III, 2, 1288f; Keil, *Hermes*, xxix (1894), 352; Beloch, *Gr. Gesch.*[2] II, 2, 238f; Thuc., vi. 27-30.

[2] See Unger, Müller's *Handbuch d. klass. Altertums-Wissenschaft,* I [2], 750 ff., and works there cited.

[3] *Hermes*, xxix, (1894) 32 ff., 321 ff. See particularly pp. 50 ff., 352 ff.

[4] See Busolt, *Gr. Gesch.* III, 2, XXV, 1288 f., and *passim;* Meyer, *G. d. A.* IV, pp. 314, 355, 506; Dittenberger, *Syll.*[3] 94, note 23; 109, note 3. Cf. Wilhelm, *Anz. Ak. Wein.* 1922, nr. XV–XVII, pp. 43 ff. A. Mommsen, *Phil.* 61 (1902), pp. 214 ff., 62 (1903), pp. 348 ff., and Ferguson, *Cl. Phil.* iii, pp. 393 ff., accept Keil's conclusions with important modifications.

[5] Beloch, *Gr. Gesch.*[2] II, 2, 230 ff., has not seen fit to accept Keil's conclusions.

tany of the following year began about Skirophorion 1. Finding it impossible on the basis of Keil's hypothesis to work out any restorations that would satisfy the rather exacting demands of our inscription, I was forced to the tentative conclusion that Keil was in error, especially as it is possible to find satisfactory restorations if we assume that the year of the Boule coincides with the calendar year.

Keil's premises, therefore, must be reëxamined to determine whether his errors are sufficient to invalidate his whole thesis or whether it will stand after alteration of certain minor details. While Keil's conclusions are very far-reaching and defined with meticulous exactness, his arguments are highly conjectural and his data meagre. Furthermore, an analysis of the second of his two articles on the divergence between the year of the Boule and that of the ordinary calendar shows that it probably never occurred to the author to see whether the more or less approximate dates established, as he thought, by the first article would in every case fit into the definite and mathematically precise system that he finally evolved.

For example, in the earlier paper Keil figured on the basis of a year of 354 (or 384) days and prytanies of 35 and 36 (or 38 and 39) days, depending upon whether an intercalary month was added to the calendar year. But in the end, he concluded that the year of the Boule consisted of exactly 360 or 390 days and the prytanies of 36 or 39 days. Consequently, Keil's tentative dates for the beginning of "official" years must be revised in the light of his matured hypothesis before they can be used to test that hypothesis. A study of Keil's chronological table and of the corresponding parts of his argument shows that Keil did not always make the necessary revisions.

From his table we learn that the Boule of 414-3 entered office *ante* Skirophorion 13, a date that he considered established by *I.G.* I, 274, Suppl. p. 35 (Dittenberger, *Syll.*³ 99), where the period from Gamelion 7 to Gamelion 24 is placed within the seventh prytany.[1] But if Keil is right as to his theory that the prytanies of a leap year contained 39 days, Gamelion 7 would come during the sixth, not the seventh prytany, even if the year began as early as Skirophorion 10. In other words, Keil forgot to make the necessary revisions, a matter comparatively unimportant in this instance, because even the date adopted, Skirophorion 13, could not be made to fit into the completed system. Keil contents himself with the explanation that 415-4 and following years were anomalous because the mutilation of the Hermae had upset both the orderly processes of the Athenian government and the calendar by which the year of the Boule was regulated.

Keil tries to prove that the Boule of 416-5 was dismissed about 18 days before its term had expired in order that the recently elected

[1] *Op. cit.*, pp. 45 ff.

Boule might conduct the investigations made necessary by the mutilation of the Hermae. Since our literary sources are silent about this dismissal of the Boule from office, Keil uses them only to bolster up a theory first obtained from a study of *I.G.* I, 183, and then to explain why the conclusions of the first article as to the beginning of the official year 415-4 do not coincide with the perfected theory and the general rule that he had discovered.

In brief, Keil says that if the twentieth day of the second prytany, on which day a payment was made for the Panathenaic festival of 415, preceded the festival,—he tries to prove that it did,—then necessarily the first prytany of the year began at least 55 days before Hekatombaion 28, or not later than Skirophorion 3.[1] But to prove that the payment was made before the festival he cites the accounts of the Goddess for the year 410-09 as conclusive evidence that payments were ordinarily made before, not after, the Panathenaic celebration.[2] Thus everything depends upon whether this last link in Keil's long chain of reasoning will hold. But unfortunately, we can readily prove by means of an argument the validity of which Keil would be the first to admit, for he uses it effectively elsewhere in his article, that the payments for the Panathenaic festival did not precede the celebration as Keil so confidently asserts. While I am unable to prove conclusively that the first prytany of 410-09 began on Hekatombaion 1, I can show that the date given by Keil, one that he stars in his table as proved, is several days out of the way. As this is one of the key-dates on which Keil's reconstruction of the calendar after 422 depends, the corrections I shall make suffice to cast discredit upon the laboriously wrought structure of Keil's argument.

From Dittenberger, *Syll.*[3] 109, we learn that in 410-09 payments for the greater Panathenaic festival were made in the second prytany, although the day of payment is not given. Keil concluded from this, first, that the year of the Boule began before Hekatombaion 1, and, secondly, that the payments for the festival preceded its celebration. While it is possible that the expenses were thus provided for in advance, such a conclusion does not necessarily follow. But since other payments of *diobelia* made in the seventh and eighth prytanies can be made to coincide nearly with the Lenaea and the Greater Dionysia on the supposition that the year began in the middle of Skirophorion, Keil thought that he had proved his point. In his second paper, he dated the first day of the Bouleutic year 410-9 with great precision on Skirophorion 19.[3]

If Skirophorion 19 was the first day of the first prytany, the last day was Hekatombaion 25. But the treasurers of 410-09 made cer-

[1] *Op. cit.*, pp. 50 ff., 351 ff.
[2] *Ibid.*, pp. 40 ff., 349 ff.; Dittenberger, *Syll.*[3] 109.
[3] *Ibid.*, pp. 38 ff., 349 ff.

tain payments for the provisions of the Knights in the first prytany, *i.e.*, on or before Hekatombaion 25, an obviously impossible thing for them to do according to Keil's reconstruction of the calendar, since they held office from one Panathenaic festival to another and therefore were not yet in office three days before Hekatombaion 28. Keil used this valid argument in another place to prove that if Prytany I, 1 fell on Hekatombaion 1, a payment on the 26th day of a prytany in the year 424-3 could not have been made in the first prytany, for, as Keil said, the Treasurers of Athena held office from Hekatombaion 28 to Hekatombaion 28.[1] Consequently, the earliest possible date for the first day of the second prytany in 410-09 is Hekatombaion 29. But although Hekatombaion 29 is chronologically possible, I consider it intrinsically improbable, for it is not at all likely that routine payments to the knights would have been made on Hekatombaion 28, the great day of the festival. Business of this sort would probably be postponed until after the holidays. Furthermore, one may question whether the new treasurers were in charge of the monies of Athena until after the last rite of the celebration, and even then the first day or so would probably be spent in checking up the inventory left by their predecessors. On the whole I should hardly expect a payment by the new treasurers before the first day of Metageitnion.[2] In that case, the payments of the second prytany for the Panathenaic festival came not earlier than Metageitnion 2, and they lose automatically their anticipatory character on which Keil frequently insisted and on which he based much of his argument.

Since the payments do not precede the festival, it seems most reasonable to suppose that payment was deferred until the final bill was presented and the account audited. This would be a more satisfactory explanation of payments in the second prytany for Panathenaic expenditures than Keil's unnecessary assumption, based on a theory now disproved, that the year of the Boule began before Hekatombaion 1.

Keil further adduced as corroborative proof of his theory the prescripts of certain *psephismata* which are dated both by archon and secretary. The handful of examples cited by him come mostly, as he would have us believe, from years when according to his scheme the year of the Boule began on Hekatombaion 1. There are exceptions that he tried to explain, those from the year 421-0. But he neglected to call attention to the universal practice of dating the accounts of the Treasurers of Athena and other financial documents by archons, and moreover one of the inscriptions which he cited as of 428-7 is now known to date from the year 411-0.[3] Thus there is no longer even a

[1] *Op. cit.*, pp. 54 ff.
[2] Keil's discussion of the records of 424-3, *op. cit.*, p. 59, parallels this argument.
[3] Dittenberger, *Syll.*³ 104.

coincidence, for Keil's rule works in only two out of the four years when decrees of the assembly were dated by archons.[1]

Turning to the accounts of loans made by the Treasurers of Athena between 426 and 422,[2] we find them difficult to restore because of mutilations. But Keil, by picking out isolated payments the records of which are incomplete, was able to show to his own satisfaction that the year of the Boule began during this period usually after Hekatombaion 1. To do this he offered sample restorations; but it should be noted that in no case did he attempt to apply his theory to payments where the date, the amount, and the interest are known, nor did he verify his first conclusions in the light of his completed theory.

Thus the correctness of Keil's theory can be tested easily by any one really desirous of establishing its truth. One wonders why Keil did not see fit to do this for himself. I shall begin with the first payment of the year 425-4, for the amount of the loan, the interest, and the day of payment are known. I shall use Keil's methods to show that if his thesis were correct the year 425-4 must have begun about Hekatombaion 25, not Hekatombaion 19.[3] Since Keil thought the interest should be reckoned up to Hekatombaion 27, we subtract 27 from 985, the number of days for which interest was reckoned, so as to ascertain the number of days (958) left in the quadrennium 426-422. As the payment was made on the third day of the fourth prytany, in the second year of the quadrennium, we add to 958 the number of days in the calendar year 426-5 (355) and the number of days in the Bouleutic year 425-4 on which no interest was paid (111)[4] and compare the sum (1424) with the total number of days in the quadrennium (1448). The difference (24) is the number of days of the calendar year 425-4 that had passed before the new Boule entered office. In other words the year of the Boule must have begun Hekatombaion 25.

Turning now to the fifth payment of the year 426-5, it can be shown in the same manner that Keil is in error six or eight days. Either the first prytany began Hekatombaion 21, or the payment was made about the fourteenth day of the eighth prytany, a date impossible to restore. To complete the test, turn to the loans made by the Treasurers of the Other Gods in the tenth prytany of 423-2. Interest on a number of small payments was reckoned for 17 days.[5] Even if we assume that the payments were made on the last day of

[1] *Op. cit.*, pp. 67 ff., 334 ff.

[2] *I. G.* I, 273.

[3] For Keil's method of determining the date of Hekatombaion 1, see *op. cit.*, pp. 62-64. For the dates of the year 425-4, see pp. 332 ff. for his discussion of the sixth oration of Antiphon, likewise his chronological table.

[4] Keil's theory requires us to figure 36 days to a prytany. Thus the third day of the fourth prytany would be the 111th of the year.

[5] See Dittenberger, *Syll.*[1] 29, lines 75-86.

the prytany, an assumption most favorable to Keil but epigraphically impossible, Prytany I, 1, 422 did not begin until Hekatombaion 11, four days after the date given by Keil. Prytany I, 1, 423, therefore, could not be assigned to Hekatombaion 1 as is required by Keil's system.

I think it is now clear that the epigraphical evidence on which Keil based his theoretical reconstruction of the calendar can be turned very effectively against him. Beloch has pointed out the weaknesses of some of Keil's arguments, but in his criticism there is very little that can be considered absolute proof.[1] Finality is now possible, for the very inscriptions on which Keil relied so firmly prove that Beloch's scepticism was in a large measure justified.[2]

Returning now to the year 416-5, one question remains to be settled. Was the old Boule dismissed about a month early so that the incoming Boule might have full charge of the investigations? Since I have found no positive evidence to show that Keil is wrong about the early entry into office of the Boule of 415-4, I must content myself with repeating that Keil has given no satisfactory proof for his contention and has cited no parallel for this extraordinary procedure. Furthermore, neither Keil's methods nor his conception of the nature of evidence, as shown in the two articles we have been considering, are such as to inspire confidence in his conclusions. The problem must be left *sub judice* until we see how the possible restorations of our inscription agree with Keil's hypothesis.

We must now try to reconstruct the inscription in such a way that four payments will fall in one prytany, the last probably about the time of the departure of the fleet in the middle of Skirophorion, διχομενίαι.[3] In this year, the day of the full moon, Skirophorion 14, fell on or near the twentieth day of the tenth prytany.[4]

It will first be necessary to fill in the beginning of line 40 with the names of the generals as they appear in the other lines. This will exactly fill the blank spaces, στρατεγοῖς ἐς Σικελίαν Ἀλκιβιάδει, Λαμάχοι Χσενοφάνος, Νικίαι Νι]κεράτο, if we take the margin given by Dittenberger and work on the basis of a line of 84 letters.

Except for a *tau* in the 59th space and an *epsilon* in the 60th, noth-

[1] Beloch, *Gr. Gesch.*[2] II, 2, pp. 15, 230 ff.

[2] Our conclusion, *viz.*, that there is no basis for Keil's precise chronological scheme, is not altered by the discovery of an inscription which has been considered by Wilhelm proof that the year of the Boule did not correspond with that of the archons. See *Anz. Ak. Wien.*, 1922, nr. XV–XVII, pp. 43 ff. (*S. E. G.*, II, 3).

[3] It is possible, though not very probable, that the last payment was made about two weeks before, either at the end of Thargelion or at the beginning of Skirophorion.

[4] If Unger's precise system of chronology for the years from 423-2 to the end of the Peloponnesian War, *loc. cit.*, note 2, page 8 *supra*, should be at fault, we might consider 416-5 a leap year. Then the payments would have fallen probably between Thargelion 26 and Skirophorion 2, or if we assume a line of 85 letters, between Thargelion 25 and Skirophorion 1.

ing remains of line 39. We know the number of the prytany, but not the day, prytanizing tribe, or day of the month, and it would seem an almost impossible task to discover these facts. When one considers the number of tribes, the number of days in a prytany, and the number of days in a month, together with the number of ways in which the order of words can be varied, it would seem as though there were innumerable versions possible.

But when one begins to study the problem, it is soon clear that the difficulty is not in the number of readings that will satisfy all the conditions but in finding any reading at all. The requirements are very exacting. For three lines of exactly the same number of letters we must find three feasible combinations of day of month and day of prytany, and for a fourth line another combination which will have a *τε* in the proper place and in which the day of prytany will come on the right day of the month as determined by the restoration of lines 42, 44, and 46, or vice versa. For a line of 84 letters I have found only one such combination at all satisfactory.[1] Thus I would reconstruct line 39 as follows: *ἐπὶ τε̃ς Hιπποθοντίδος δεκάτες πρυτανευόσες Θαργελιο̃νος φθίνοντος]τε[τράδι, τρίτει τε̃ς πρυτανείας.* In the blank spaces of lines 42, 44, and 46 we must then insert the following dates: (42) *τετάρτει τε̃ς πρυτανείας, Θαργελιο̃νος τρίτει φθίνοντος,* (44) *ἐνάτει τε̃ς πρυτανείας, Σκιροφοριο̃νος τρίτει hισταμένο,* (46) *εἰκοστε̃ι τε̃ς πρυτανείας, καὶ Σκιροφοριο̃νος διχομενί]αι.*[2]

This restoration is in full accord with the probable departure of the fleet about a month after the mutilation of the Hermae. Furthermore payments made between Thargelion 27 and Skirophorion 14 would agree with the custom of making the payments almost immediately before the departure of an expedition and in close succession. But if these reconstructions are accepted, we must reject Keil's hypothesis of a change of Boule about Skirophorion 1.

To continue, in line 41 there is only an *iota* left. That is apparently the last figure of the sum of the first payment, the one we have just been discussing. As we have no idea just how much money the generals received at this time, we must leave blanks in this line. After Hερμεῖοι, the demotic of Antimachus the assessor, we might put *φσεφισαμένο το̃ δέμο τὴν ἄδειαν*, except that there is no place for this formula in the case of the other payments. The question now arises whether we were justified in excluding it from the restorations we

[1] The only alternative I have discovered is not entirely satisfactory because it groups the payments within a period of five days between Thar. 28 and Skir. 2, probably a week or ten days before the fleet sailed. The alternative readings are as follows: (39) *ἐπὶ τε̃ς . . . . . . ίδος δεκάτες πρυτανευόσες Θαργελιο̃νος φθίνοντος τρί]τε[ι καὶ πέμπτει τε̃ς πρυτανείας,* (42) *hέκτει τε̃ς πρυτανείας, Θαργελιο̃νος δευτέραι φθίνοντος,* (44) *hεβδόμει τε̃ς πρυτανείας καὶ Θαργελιο̃νος hένει καὶ νέαι,* (46) *hεμέραι ἐνάτει τε̃ς πρυτανείας, Σκιροφοριο̃νος δευτέρ]αι.* I have found no combination of four readings for a line of 85 letters.

[2] Possibly line 44 or 42 should read as follows: *hεμέραι ὀγδόει τε̃ς πρυτανείας, Σκιροφοριο̃νος δευτέρ]αι.*

35 ['Αθεναῖοιἀνέλοσανἐπὶ'Αριμνέστοἄρχοντοςκαὶἐπὶτε̂sβολε̂shε̂ι..........πρôτοsἐ]γραμμάτευεταμία[ι 35

36 [hιερôνχρεμάτοντε̂s'ΑθεναίαsΔεχσίθεοsΦυλάσιοsκαὶχσυνάρχοντεsοἷsΛυσικλε̂sΔ]ρακοντίδοΒατε̂[θε 36

37 [νἐγραμμάτευεπαρέδοσανΗελλενοταμίαιs.................................Π]ạ[λλ]ẹνẹῖ(?) – – – – 37

38 [...οι— – – – – – – – – – – – 38

39 [ἐπὶτε̂s – – – – –δεκάτεsπρυτανευόσεs– – – – – – – – – – – – – – – – – τε– – – – – – – – – – – – 39

40 [στρατεγοῖsἐsΣικελίαν'ΑλκιβιάδειΛαμάχοιΧσενοφάνοsΝικίαιΝι]κεράτοΚυδαντίδεικαὶπαρέδρο[ι'Αν 40

41 [τιμάχοιΗερμείοι.......................................I 41

42 [– – – –ειτε̂sπρυτανείαsΘαργελιôνοs– – – φθίνοντοsστρ]ατεγοῖsἐsΣικε[λίαν'Α]λκιβιάδειΛαμάχο[ι 42

43 [ΧσενοφάνοsΝικίαιΝικεράτοΚυδαντίδεικαὶπαρέδροι'Αντι]μάχοιΗερμείοιΔ̣.. 43

44 [– – – –ειτε̂sπρυτανείαsΘαργελιôνοs– – – – φθίνοντοs]στρατεγοῖsἐsΣικελίαν'ΑλκιβιάδειΛαμάχοι 44

45 [ΧσενοφάνοsΝικίαιΝικεράτοΚυδαντίδεικαὶπαρέδροι]'ΑντιμάχοιΗερμείοιΔ̣ΤΤΤΤΧ...Η 45

46 [– – – –ειτε̂sπρυτανείαsΣκιροφοριôνοs– – – – – – – –]αιστρατεγοῖsἐsΣικελίαν'ΑλκιβιάδειΛαμάχο[ι 46

47 [ΧσενοφάνοsΝικίαιΝικεράτοΚυδαντίδεικαὶπαρέδροι]'ΑντιμάχοιΗερμείοιχ[ρ]υσίοΚυ[ζ]ικε[νὸs]στατε̂ρ[α 47

48 [s.......................................]⊢⊢⊢IIIC 48

PLATE I: RESTORATION IN I. G. I, 182.

have tentatively adopted. Possibly one blanket vote authorized all of the payments of the tenth prytany. It is possible too that a certain class of payments could be made without a specific vote of *adeia*, for in the accounts of the following year no record of this vote was placed on the stone in connection with the payments described as loans. The first payment of the year, not described as a loan, was authorized in the ordinary way.[1]

Did the payments for the Sicilian expedition in the spring of 415 take the form of loans as did those of the following year? Were they on this account subject to a different procedure? Or were some of them loans and others ordinary payments? If that was the case, then some required the vote of *adeia*, while others did not. That would make it necessary for us to find a place for the word ἐδανείσαμεν in one or more of our readings. If we do that, we must give up trying to use the double date, for there is no room to add ἐδανείσαμεν in any of the readings we have adopted. Dating by months within a prytany was not unheard of.[2] On the other hand, if some of the payments were loans and others not, two payments, of different kinds, may have been made on one day. Then we should be able to restore the end of the blank in line 46 as follows: τε̃ι αὐτε̃ι hεμέραι.[3] The restoration opens the way to a range of possibilities for the other lines even more varied than those we have already considered. Possibly the final solution of our problem is to be sought in this direction, but as yet I have found no combination of readings even as good as those proposed above.

For the present, therefore, it will be more consistent to assume that the payment of line 41 was partly or entirely in Cyzicene electrum staters. The words χρυσίο Κυζικενὸς στατε̃ρας will fill a part of the blanks, the rest we will leave untouched.

Above the τε of line 39 are traces of two letters, οι, which belong to a previous payment and form the top line of fragment *e*. Above is fragment *c*, with an indeterminate interval between the two fragments. In line 37, the last of fragment *c*, is a *nu* and the tops of some letters which are not yet identified: ʌ . . FNᒥ'. As the last payment of the previous year went to the fleet at Melos through the Hellenotamiai, it seems probable that this payment, the first of our year, was destined for Melos too. The only satisfactory combination of letters that I could find was A . . ENEI, which looks as though it might be a part of a demotic or a name in the dative. Line 37 could then be restored approximately as follows: ν ἐγραμμάτευε παρέδοσαν Ηελλενοταμίαις . . . Παλλενει̃(?).

[1] I believe that all of the payments of 415-4, except the first, were loans, for this reason, that the first payment, made in the third prytany, was recorded out of its proper chronological sequence, that is, before a payment of the second prytany described as a loan. The word ἐδανείσαμεν, therefore, introduces not merely the second payment of the year but all that follow as well.

[2] See Dittenberger, *Syll.*[3] 99.

[3] For parallel see Dittenberger, *Syll.*[3] 94, v. 69.

In conclusion, our inscription illustrates the intense activity with which Athens was filled during the early summer of 415. Finally it should be noted that neither of Keil's hypotheses, one of which is demonstrably false, the other unproved, can be reconciled with the inscription as it has been tentatively restored.

The inscription as restored is given on the accompanying plate.[1]

ALLEN B. WEST

WHEATON COLLEGE,
NORTON, MASS.

[1] I give here only what I consider proved. For the blanks I refer the reader to the discussion in the text where the difficulties and alternative readings are stated. When we can settle definitively one or more of the following questions, the number of letters in a line, the octaeteris that was then in use, and the character of the payments, whether loans or not, greater certainty will be possible. In line 47 I have restored Κυζικε[νὸς] in place of the reading ordinarily given, Κυζικε[νô], because the *στοιχηδόν* arrangement demands the extra letter.

Archaeological
Institute
of America

THE METOPES OF THE SICYONIAN TREASURY AT DELPHI

The following brief observations on three metopes from the little Doric building at Delphi traditionally known as the Sicyonian Treasury may be of interest to admirers of these gems of archaic Greek sculpture.

Phrixus on the Ram

Two varying descriptions of this fragment have been published by M. Homolle. In *B.C.H.* XX, 1896, p. 660, fig. 1, he wrote: "Sur le dos trace d'une figure drapée, qui y était autrefois assise dans la même pose que la femme au taureau; reste d'étoffe du corsage; cassure d'un bras qui s'appuyait au dos de l'animal." And on p. 666 he remarked that the remains of drapery belong to a woman's garment, and that consequently the rider was Helle. In *Fouilles de Delphes*, IV, p. 26, fig. 14, he entitled the metope *Hellé sur le bélier*, but described the figure as follows: "Au dessus du bélier, bras g. d'une femme, dont le poignet seul reste intact avec un bracelet, unique indication certaine du membre conservé et du sexe de la personne représentée. Du bras jusqu'à l'épaule, simple silhouette; en avant un bout de l'étoffe du corsage; au dessous, plus rien ne subsiste.

"Il semble qu'on doive restituer une figure de femme debout-assise sur l'animal elle sortirait de la métope—et de face, qui a saisi le bélier par le cou et le flatte ou le pare. Le torse est très incliné vers sa g., comme celui d'Europe, pour éviter que la tête ne déborde les limites du cadre, tout en laissant au bélier une taille très forte et plus que naturelle."

An examination of the fragment in 1913 suggested still another interpretation, which, so far as I know, has never been advanced in print. The "bracelet" on the "wrist" of the figure is actually the hem at the end of a short sleeve. It is carved in relief encircling the upper arm and continuing up towards the shoulder. The sleeve of the better preserved horseman on the Argo metope is treated in exactly the same way. The "bout de l'étoffe du corsage" falling on the back of the ram is manifestly the end of a short tunic similar to that worn by the same horseman. Above it traces of the belt are plainly to be seen. The only reasonable restoration is that of a male figure, Phrixus, bestriding the ram and leaning farther forward than does Europa on the bull. Compare the accompanying photograph, which I owe to the kindness of Professor Clarence Kennedy. The

outline of the lower part of the rider's back appears more clearly in the illustrations published by Homolle. His leg seems from the traces to have been bent sharply at the knee.

The elaborate, schematic rendering of the magical fleece is also well shown in the photograph. Four rows of large tufts are preserved. Each tuft has horizontal chamferings; and alternate tufts in each row show in addition vertical striations. As Homolle has noted in his earlier and more detailed description, traces of red paint appear only on the more elaborately carved tufts. The simpler tufts were undoubtedly painted a dark color, probably black. This alternation of colors, which is paralleled on other *poros* sculptures as

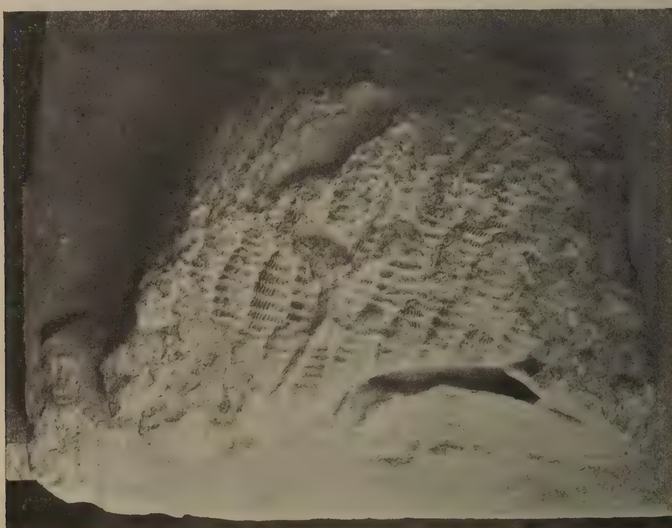

FIGURE 1. PHRIXUS ON THE RAM

well as on vase paintings, must have contributed greatly to the decorative effect of the metope.

THE SHIP ARGO

Among the smaller fragments from the metopes is one showing a portion of the side of a ship identical in every respect with the representation of the Argo (*Fouilles*, IV, p. 30, fig. 15a). Yet, as Homolle has observed, there is no space for it in that metope. He assumes that it belonged to a second slab depicting a different episode in the myth of the Argonauts. But another explanation of the fragment seems preferable. It is that the Argo was represented only once on the Treasury, but that it occupied two adjoining metopes. Aside from the existence of the small fragment, the chief argument in favor of this hypothesis is that only four of the participants in the adventure are shown on the extant relief, and that the leader of the expedi-

tion is not among them. Jason and other members of his crew were probably figured on the second slab representing the stern of the vessel.

The Calydonian Boar

In his recently published *Delphische Studien*, p. 47, Dr. Poulsen assigns the metopes of the Treasury to two different sculptors. He finds that Europa, the Ram, the Argo and the Cattle-Raid are by one hand, while the Boar is by an artist of inferior merit. To this second artist he assigns also the "fragmentary relief with a horse." But the only fragment of a horse so far connected with the metopes is that described by Homolle, *Fouilles*, IV, p. 30, fig. 15d. And its assignment to the horseman at the right-hand end of the Argo metope seems certainly correct. An archaic relief with a horse's head is, indeed, exhibited in the Museum at Delphi on the same pedestal as the Sicyonian metopes. But it has nothing to do with them. Not only does it differ in style and technique, but its material is marble. In the circumstances it would seem that we may still subscribe to M. Homolle's more favorable estimate of the boar, and assign all the metopes to the hand of one and the same admirable artist.

L. D. Caskey

Museum of Fine Arts
Boston

American School of
Classical Studies
at Athens

THE COLOSSUS OF BARLETTA

The great bronze statue in Barletta[1] (Fig. 1) long well known, was in 1912–13 the subject of an exhaustive publication by Koch.[2] In his examination he found that the legs, the right arm including the elbow, and the left arm below the fold of the *paludamentum* which crosses it, were restorations. Subsequently the right leg was removed, and that side of the body is supported by masonry; at least it was in October, 1923.

In regard to the identification of the figure, Koch's conclusions may be summarized briefly.

1. The old tradition assigning to it the name Heraclius must be genuine; it is to be explained by the usurpation, on the part of that emperor, of a statue made centuries before.[3] 2. The statue is not earlier than 324, since diadems of the kind worn by it then first appear on official monuments; and "*Tracht und Stil*" require a date before Justinian.[4] 3. The man is about fifty years old. Through this fact a number of emperors of the fourth and fifth centuries are excluded from consideration, since they died too young or ascended the throne too old. There remain Magnentius, Valentinian I, Valens, and the two Theodosii.[5] 4. A study of the coins of these five emperors permits the identification as Valentinian I.[6]

The statue had previously been identified as Theodosius I and as Valens, but not so confidently nor after so thorough a study. Delbrück accepts Koch's conclusion, which I suppose may be regarded as holding the field at present. But an examination of the numismatic evidence, as presented for example in Koch's figure 9, must leave a good deal of doubt. It is probably true that Valentinian is a better possibility than any other of the five emperors named above; but the very individual profile of the statue, with the deep depression at the root of the nose, the high, short nose, the long upper lip and remarkably long chin, is certainly not reproduced in any striking fashion on the coins.[7] It is in fact by a process of elimination that Valentinian is reached.

There is one factor, noted but afterward altogether ignored by

[1] Bernoulli, *Römische Ikonographie*, II, 3, pp. 257–259, pl. LVI; Arndt-Bruckmann, *Griechische und Römische Porträts*, 895–898; Delbrück, *Bildnisse Römischer Kaiser*, XL–XLII; Wulff, *Altchristliche und Byzantinische Kunst*, pp. 158f., pl. XI; Dalton, *Byzantine Art and Archaeology*, p. 125; Toesca, *Storia dell' Arte Italiana*, I, pp. 245f., fig. 144; Ebersolt, *Les Arts Somptuaires de Byzance*, pp. 19f.; for older literature see Koch.

[2] *Antike Denkmäler*, III, 2, pls. 20–21, pp. 20–27.

[3] P. 21. [4] P. 24. [5] Pp. 25f. [6] P. 26.

[7] For coins of Valentinian as close to the colossus as any see *Monnaies Romaines Impériales . . . Collections . . . Vautier et . . . Collignon*, pl. LV, 1806 and 1807.

Koch, which eliminates Valentinian himself except as a remote possibility and with him the other four candidates. This is the beard. Bernoulli thought that there was no beard, but Koch

Antike Denkmäler

FIGURE 1. THE COLOSSUS OF BARLETTA.

describes it correctly.[1] It is represented by a slightly raised and roughened surface, substantially as in Roman portraits of the middle of the third century. The beard is divided from the smooth part of the face by a perfectly sharp line, and does not cover the

[1] P. 23.

whole cheek; thus the mustache is left almost separate from the beard proper. According to Koch it can be seen that the mustache is long and drooping: "*ein lang herabhängender Tartarenschnurrbart.*" The arrangement of the beard is precisely that which appears on coins of Diocletian.

Between Constantine and Phocas, the following emperors are represented on the coins as bearded: Vetranion, Julian, Procopius, Gratian, Magnus Maximus (?),[1] Eugenius, Honorius, John, Maximus (409–411), and Leo I. Of these Julian, Gratian, and Honorius certainly died too young to be considered in connection with the statue at Barletta; as to the ages of the others I have seen no exact statement but Vetranion seems to have been quite old; historical circumstances would exclude him in any case, as well as Maximus (409–411). John, Magnus Maximus, Procopius, and Eugenius all had short and troubled periods of power, and it is highly improbable that any of them had leisure for the erection of great monuments; moreover they are all in their coin portraits distinctly unlike the colossus. It may be noted also that John, Magnus Maximus, and Eugenius ruled only in the West; whereas according to the early tradition the statue came from Constantinople, and it surely would never have survived in Italy. In fact Valentinian was also a western emperor but the objection is not so serious in his case since the eastern ruler, Valens, was notoriously subservient to his brother who was buried in Constantinople.

This process of elimination leaves Leo I as the only possibility between Constantine and Phocas. Leo was an eastern emperor who enjoyed a prosperous and fairly long reign. Portrait statues were made in court circles at the time; we hear of one representing the emperor's physician Jacob.[2] The age at which Leo ascended the throne, fifty-seven, is not impossible for the colossus, though fifty would seem more likely. Only a small minority of the coins show Leo bearded; four of these are reproduced in Figure 2.[3] The four coins, all struck at Thessalonica, represent four dies, though the differences are slight. They show a face in which the nose is rather short in comparison with the chin, somewhat as in the colossus; but there is no depression at the root of the nose. The beard is short and is pretty clearly represented as curling naturally, not as closely clipped; this is in accordance with Cedrenus,[4] who says that Leo was *ὑπόσπανος τὴν γενειάδα*. The beard of the colossus appears rather

[1] *Cf.* Bernoulli, *op. cit.* II, 3, p. 260.
[2] Unger, *Quellen d. Byz. Kunstgesch.* p. 282, no. 809.
[3] Fig. 2a is from a photograph of a cast of a solidus in the British Museum; Mr. Sidney P. Noe very kindly secured the cast for me. Fig. 2b is from the illustration of No. 2064 in Hirsch's catalogue XXXI; this also was sent me by Mr. Noe. Figs. 2c-d are from the illustrations of Nos. 285 and 286 in Naville's catalogue, *Monnaies d'Or . . . Collection de Sir Arthur Evans.*
[4] *Historiarum Compendium* 346 C.

to be a heavy growth closely clipped, though the treatment is so conventional that one cannot be certain.

The portrait of Leo as we see it on these four coins, of good workmanship and in fairly good agreement with one another, is probably dependable. The coins which show the emperor beardless [1] have a great variety of inconsistent profiles, of which none resembles the colossus as much as the four specimens here reproduced. In these the resemblance is not close; yet the coins would not render impossible an identification as Leo.

There are other considerations. Leo was a soldier before he became emperor, but an obscure soldier, and as emperor he did not take part in any campaign. Hence a colossal armored statue of him must have appeared somewhat absurd. The colossus is not an ordinary statue: at whatever period it was made, it would rank as a grandiose military monument, such as could be set up only by a

a *b* *c* *d*

FIGURE 2. COINS OF LEO I.

great warrior or by a poseur. Leo was neither; all that we know of him indicates that he was an unusually sensible and unassuming man, who would be most unlikely to make himself out a military hero. Since he was placed on the throne as a creature of the great Patrician Aspar and only gradually established his independence, it is particularly improbable that such a statue should have been set up near the beginning of his reign; yet the colossus can hardly represent a man much older than fifty-seven. For these reasons an identification as Leo is improbable, though he is not so thoroughly disqualified as Valentinian and all the others earlier than Phocas.

Phocas was the last emperor before Heraclius. On the coins he usually has a pointed beard. Otherwise he could hardly be distinguished from Heraclius so far as the coins are concerned. But no one, probably, would wish to reject the tradition if the possibilities are reduced to these two.

The field within Koch's limits being exhausted, it is in order to inquire whether his limits are justified. It will not be questioned that the figure is later than Constantine; but do "*Tracht und Stil*" really necessitate a time prior to Justinian, or to Heraclius? Pass-

[1] Through the courtesy of Mr. Oikonomos, I was able to examine the coins of Leo, as well as of other emperors, in the Numismatic Museum at Athens. Drawings in Sabatier, *Monnaies Byzantines*, I, pls. VI–VII.

ing for the present the question of style, it is a fact that the armor worn by the colossus, especially the solid metal cuirass, was not worn at the time of Heraclius.[1] But an emperor might nevertheless be represented wearing it; it was the old heroic style. The classical Roman practice of portraying emperors nude, in imitation of Greek sculptural types, is analogous. Byzantine dependence on earlier models was, of course, great at all times; and the respect of Byzantine artists for Roman usage in figure sculpture would be especially great, since in this field they could learn nothing from the orient. A figure wearing the solid metal cuirass is found among the frescoes in the Metropolis church at Kalabaka, which belongs to the fourteenth century. It is safe to say that this example is not unique in Byzantine art.

As for the diadem, it has the same form in the colossus, on the coins of Valentinian, on the coins of Heraclius, and on the coins of all the intervening emperors; it occurs also in the mosaic portrait of Justinian in S. Vitale at Ravenna. On the coins of Valentinian this kind of diadem is not however the most common one—only one of the five coins in Koch's figure 9 has it—while in the coinage of Heraclius it is the regular form. On the coins of Tiberius II and his successors, including Heraclius, there is usually a cross on the front of the diadem. The cross sometimes rests on a projecting piece such as is present on the front of the diadem worn by the statue: an examination might show that the cross was originally present and has been broken away. But the point is not important, since the cross is not always present on the coins.

The mode of wearing the diadem may be observed. In the coins of Valentinian and most of the other early emperors the diadem fits behind the ears, which are visible; while on the colossus the thick hair covers the ears, and the diadem is higher on the head. This appears to be the case on certain profile coins of Heraclius;[2] and the thick hair which appears at the sides of the face in coins showing the front view would indicate a similar mode.

The numismatic evidence as to the features of Heraclius [3] is most unsatisfactory; the coin-engravers of the time were obviously not concerned with iconographic accuracy in their designs. But it is clear that he wore a closely clipped beard with a separate mustache. In the coins which show the profile view, and in those only, he is beardless; this has led some authorities to see in them portraits of the emperor's son Heraclius Constantinus. He would doubtless resemble his father somewhat. In some of the profile views[4] the

[1] Dalton, *op. cit.* p. 684.
[2] E. g. Wroth, *Imp. Byz. Coins in the British Museum*, pl. XXIII, 15.
[3] For a good series see Wroth, *op. cit.* pls. XXIII–XXX; *J. Int. Arch. Num.* VII, 1904, pl. VI, 2–21.
[4] E. g. Wroth, *op. cit.* pl. XXIII, 18.

nose is very short in proportion to the lower part of the face and the profile suggests the colossus as much as does the portrait on any coin. On other coins of Heraclius, however, quite different profiles appear.

It is impossible, then, to identify the colossus as Heraclius on numismatic evidence; but this evidence affords no objection to the identification. Of course the objection that has always prevented serious consideration of Heraclius was based on the good and comparatively classical style of the statue. It was considered out of the question that the "*mumienartig*" art of the seventh century could produce such a work.[1] This assumption was perhaps reasonable; but Delbrück, by his irrefragable identification of an excellent portrait of Justinian II,[2] has shown the necessity for a complete revision of the usual ideas about Byzantine sculpture. Justinian II lived at the beginning of the eighth century, a hundred years later than Heraclius. The course of history during this period makes it practically impossible that the level of artistic skill in the empire should have been rising. It is therefore not only possible but virtually certain that the head of the colossus was not beyond the power of sculptors contemporary with Heraclius. The armored body would present a task of much less difficulty; it would require only competent craftsmanship and the imitation of earlier statues.

Since Justinian II was a descendant of Heraclius, points of resemblance between Justinian and the colossus are worth noting. In fact they have in common two distinctive features: a very short nose and eyebrows that slope upward, for most of their length in almost straight lines, from the inner ends. Of course no close resemblance between Heraclius and Justinian would be expected.

In summary: the old tradition identifies the statue as Heraclius; it cannot well be any earlier emperor except Phocas and possibly Leo I; since Delbrück's discovery, there is no reason for disbelieving the tradition.

The dated coins of Heraclius first show a long beard in 629–630.[3] Hence the statue, showing him with a short beard, should be earlier. Since Heraclius was born about 575 and was hardly younger than fifty when the statue was made, 625 may be regarded as a *terminus post quem*, approximately at least. As Heraclius was engaged in the Persian war from 622 to 628, with brief intermissions, one would conclude that the statue was made in 628–629, as a memorial of the glorious conclusion of that conflict. This of course is exactly the time given by the tradition as embodied in the epigram of Grimaldi.[4]

F. P. Johnson

University of Illinois
Urbana

[1] Bernoulli, *op. cit.* II, 3 p. 258.
[2] *Röm. Mitt.* XXIX, 1914, pp. 71–89.
[3] Wroth, *op. cit.* p. 189, note 3.
[4] Koch, p. 21.

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A RESTORATION IN *I.G.* I, 37

There is published in *I.G.* I, Suppl., p. 140–1 a fragment of the Athenian assessment list of 421 B.C. And three items listed on this fragment are especially noteworthy because of the extremely low amount of the tribute recorded. The towns of Mecyberna, Singus, and Gale are each assessed at ten drachmae.[1]

Δ Σίγγιοι
Δ Μηκυβερναῖοι
Δ Γαλαῖοι

These three assessments of ten drachmae are the lowest indicated on any extant fragment of the tribute or assessment lists, and as such they form a unique combination. The only approach to this minimum of tribute, so far as I know, is that of ten and a half drachmae recorded for Keria in *I.G.* I, 37.

In a fragment of the assessment list of 425/4, however, (*I.G.* I, 37, frg. z) there are preserved the same three figures:

Δ
Δ
Δ

The stone is broken away to the right of the numerals and no attempt at restoration is given in the Corpus. However, in view of the unusually low amounts recorded, and in view of the unique sequence of three of these amounts together, there need be no hesitation in restoring after the numerals in *I.G.* I, 37 frg. z the names as they are found in *I.G.* I, Suppl., p. 140–1. We may, perhaps, even go further and include in the restoration the preceding item and the two following items, which correspond (in the assessments quoted) with the preceding item and the two following items of *I.G.* I, Suppl., p. 140–1.[2]

I.G. I, 37 frg. z will then read, in part:

X ['Ηράκλειον]
Δ [Σίγγιοι]
Δ [Μηκυβερναῖοι]
Δ [Γαλαῖοι]
T [Τράιλος]
X [Βορμίσκος]

[1] Cavaignac, *L'Histoire Financière d'Athènes au Ve Siècle*, pp. XLV–XLVI, and Pl. I, no. 3, records the amount in each case as ten talents, but confirmation has been sent me from Athens by Mr. Phillip Davis of the American School of Classical Studies that the reading of the Corpus is correct.

[2] In *I.G.* I, Suppl., p. 140-1, the assessment of 'Ηράκλειον is given as χ. I do not know why the assessment is given in the restored transcript as H.

Before it is possible to show the bearing of this restoration on our knowledge of Athenian history of the fifth century, it will be necessary to determine, as accurately as possible, the location of the five towns involved.

Heracleion cannot be identified with certainty.

Trailus is probably identical with Tragilus, a town known to have been situated near the site of the later Philippi.

Bormiscus was on the Strymonic gulf at the point where Lake Bolbe empties into the sea.[1] Mecyberna was at the head of the Toronaic gulf, on the site of the modern Molyvopyrgus.[2] Singus was on the western coast of the Singitic gulf between Pilorus and Sarte.[3]

Gale has usually been placed on the Thracian coast, or slightly inland, north of Samothrace.[4] The Danish archaeologist, Dr. Kinch, was the first to identify Gale with the Galepsus of Herodotus (VII, 122) on the peninsula of Sithonia north of Torone.[5] And his conjecture is now confirmed by *I.G.* I, Suppl., p. 140–1 and *I.G.* I, 37 frg. z, which imply at least a geographical proximity between the three cities Singus, Mecyberna, and Gale. There was a town Galepsus, a Thasian colony, on the coast of Thrace east of the mouth of the Strymon,[6] and this is the only Galepsus known to Thucydides. Also, the existence of the second Galepsus rests on the evidence of Herodotus alone. With the evidence of the assessment lists now at hand, it seems safe to say that the Galepsus of Herodotus was the Gale of the tribute lists, and that the Γαλήψιοι of the tribute lists represent the people from Galepsus beyond the Strymon.[7]

It is impossible at once to conclude from the appearance of these names in the assessment list of 425/4 that they were in Athenian hands when the assessment was drawn up, for it is known that names of cities which never at any time paid tribute to the Athenian empire were included in that list. Such cities were Melos and the towns of the Euxine Sea.[8]

Perhaps, then, Trailus, in the rich Pangaean region, was included in the assessment rather in the hope that it would be brought into the empire than because it was already subservient to Athens.

[1] Thuc. IV, 103, 1.

[2] Leake, *Travels in Northern Greece,* Vol. III, p. 155. Wace, *The Site of Olynthus, B.S.A.* XXI, p. 12.

[3] Herodotus, VII, 122. Leake, *Travels in Northern Greece,* Vol. III, p. 153, places the town near the modern Sykia, on the opposite side of the Sithonian Peninsula from Torone, and Struck, *Makedonische Fahrten, Chalkidike,* p. 63 (whose view is followed by Kiepert) places it farther north near the modern Cape Βουρβοῦρι.

[4] See map at end of Vol. I of the Corpus.

[5] Kinch, *De hellenske Kolonier paa den makedoniske Halvφ, Festskrift Thomsen,* p. 149 and note.

[6] Thuc. V, 6, 1.

[7] The Galepsus referred to in fragment 122 of Hecataeus, and cited in Pauly-Wissowa (s. v.) in connection with the Galepsus on Sithonia refers to the Galepsus east of the Strymon (Steph. Byz. Γαληψός, πόλις Θρᾴκης καὶ Παιόνων · Ἑκαταῖος Εὐρώπῃ).

[8] Beloch, *Griechische Geschichte,* II, 1, 330, note 3, and II, 2, 361.

In the case of Bormiscus, the probabilities are strongly that it was actually in Athenian possession. It is certain that the Athenians controlled most of the coast of the Strymonic gulf. Acanthus, Stageirus, and Argilus had not as yet revolted, and in fact did not revolt before the arrival of Brasidas. Even the fickle Perdiccas of Macedon, who might have prevented the submission of Bormiscus to Athens, was at peace with Athens at the time of the assessment of 425/4.

As for Singus, Mecyberna, and Gale, there is direct evidence in the inscriptions themselves that they were under Athenian control when the assessment was made. Only in this way can the remarkably low assessment of ten drachmae each be explained. At the beginning of the Peloponnesian War, when Potidaea revolted from Athens, along with Bottice and Chalcidice, the Chalcidians had dismantled their coast towns and united in Olynthus to make it a single strongly fortified city.[1] The policy of the Chalcidians at once indicates that they had no intention of trying to defend their coast from the Athenian fleet. The few inhabitants of the coast towns, therefore, who refused to go to Olynthus (perhaps mostly Athenian sympathizers) were the only ones left to pay tribute to Athens after the synoecism at Olynthus had been effected. Singus, Mecyberna, and Gale were coast towns of Chalcidice, and the remarkably low assessments of ten drachmae each indicate the extent to which the population had been drawn away from the shore.

Furthermore, the three towns in question, situated as they were on either side of the Sithonian peninsula and on the northern shore of the Toronaic gulf, represent practically the entire coast of Chalcidice proper, which extended from Mecyberna on the west around to Assera on the northern shore of the Singitic gulf. And the appearance of these three towns in *I.G.* I, 37, frg. z proves that early in the war the entire coast of Chalcidice, along with its towns, or remains of towns, had been recovered by the Athenians from the revolting Chalcidians.

Benjamin D. Meritt

Brown University

[1] Thuc. I, 58.

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PEACE BETWEEN ATHENS AND BOTTICE

By a comparison of the terms of the preserved Peace of Nicias, as given in Thucydides V, 18–19, with two inscriptions in which the small Bottic towns of Tripoae and Camacae are mentioned it is possible to throw some light on the relations between Athens and Bottice during the closing years of the so-called Archidamian war.

In the text of Thucydides, Spartolus is the only Bottic city mentioned as hostile to Athens. In *I.G.* I, 260, Tripoae and Camacae are recorded as having paid tithes of ΔͰͰͰII and Δ, respectively, to Athena. The names Tripoae and Camacae occur also in *I.G.* I, Suppl., p. 142, n. 52, 53 = Ditt. *Syll.*³ I, 89. The first inscription is from the archonship of Aristion (421/0), and was published in the spring of the year 420. The latter inscription (Ditt. *Syll.*³ I, 89) records a treaty of alliance made between the Athenians and the Bottiaeans, but its exact date is a matter of dispute. In it the names Tripoae and Camacae are spelled Τριποι[αί] and [Κ]εμακαί, but there is no doubt about the restoration and the identity of the towns. This inscription is also conclusive proof that Tripoae and Camacae were Bottic towns, for they are listed as two of the Bottic cities which ratified the alliance with Athens.

Busolt (*Griechische Geschichte*, III, 2, p. 1171) places the Bottic alliance in the year 422, and looks upon it as the direct result of the alliance between Athens and Perdiccas. Meyer (*Geschichte des Altertums*, IV, pp. 494 ff.) for orthographical reasons thinks that the inscription belongs after the year 420, and places it in the year 417. In the last edition of Dittenberger's *Sylloge* the inscription is dated approximately in the year 420. And Beloch has placed it in the year 418/7 (*Griechische Geschichte*, II², 1, p. 352, note 5).[1]

Now, from the text of the treaty itself two things are apparent: (1) that not all the Bottic cities participated in the alliance, and (2) that Spartolus, the chief city of Bottice, was one of these cities which did not take part. Evidence for the former assumption lies in the phraseology of the document. The Athenian oath reads: *ἀμυνῶ τοῖς Βοττιαίοις τοῖς ξυντιθεμένοις τὰς ὁμολογίας*, and in lines 21–25 there is the provision: *τὰς δὲ ξυνθήκας τὰς περὶ τῶν σπονδῶν καταθεῖναι Ἀθηναίους μὲν ἐμ πόλει ἀναγράψαντας ἐστήλῃ λιθίνῃ καὶ τὰ ὀνόματα τῶν πόλεων ἐγγράψαντας τῶν ξυντιθεμένων τὴν φιλίαν καὶ τὴν ξυμμαχίαν.* Concerning the second point noted above it is clear from the stone as

[1] It is not necessary to quote the date for the Bottic alliance as given by West, '*The Chalcidic League*,' *Bull. of the Univ. of Wis.*, History Series, 1912, published 1918, p. 84, note 5. Dr. West is now fully in accord with the conclusion reached in this paper, that the peace was ratified in 422.

preserved that Spartolus did not head the list of cities which ratified the treaty. And as chief city of Bottice it was entitled to first mention, had it been party to the alliance (cf. comment in Dittenberger).

Meyer has assumed that there was no mention of tribute in the treaty. He says (*l.c.*) "Ein Theil der Landorte der Bottiaeer, aber nicht Spartolus, trat zu Athen zurück und verpflichtete sich, es im Kriege zu unterstützen; von Tribut war nicht mehr die Rede." To say that there was no longer any question of tribute is somewhat misleading. In *I.G.* I, 260 there is sufficient proof that the question of tribute, so far as concerned Tripoae and Camacae, was not only brought up for discussion but definitely settled. What is true of Tripoae and Camacae must also have been true for the other cities of the Bottic alliance.

Furthermore, the question of the tribute could not have been settled before the negotiations of the Bottic alliance. From the treaty as it is preserved it is clear that the alliance ends a period of hostility between the Athenians and the Bottiaeans. The Bottiaeans swore to have the same enemies and friends as the Athenians, and both parties swore: οὐ μνησικακήσω τῶν παροιχομένων ἕνεκα (*cf.* Busolt, *l.c.*). Such an oath is meaningless if we assume that reconciliation had proceeded far enough beforehand to include the settlement of the tribute question. The inscription as preserved comprises only the conclusion of the alliance, and it is by no means certain that the question of tribute did not form a considerable part of the body of the treaty. In fact, the very first word of the inscription, although the stone is so fragmentary that a restoration is impossible, seems to be concerned with some arrangement for the levying of tribute.[1]

The Bottiaeans had been hostile to the Athenians ever since the revolt of 432, and this treaty must be considered as the first made after the conclusion of hostilities. The fact that Tripoae and Camacae were parties to the alliance and that both of these names occur in *I.G.* I, 260 as actually paying tribute to Athens proves that the treaty was made at least before the spring of the year 421/0. The theories of Meyer and Beloch are automatically invalidated.

With the help of Thucydides it is possible also to show that the treaty with Bottice must be dated earlier than the Peace of Nicias, and consequently that the date as suggested in Dittenberger cannot stand.

We have seen that Spartolus was not included in the list of cities party to the alliance, and we learn from Thucydides V, 18, 5 that it was still hostile to Athens at the time of the Peace of Nicias. Also, it is the *only* Bottic city named as hostile to Athens at that time.

[1] The word is τά]χσες.

Assuming, then, that the Bottic alliance was made after the Peace of Nicias, we must also assume that cities party to the alliance were hostile to Athens at the time the Peace of Nicias was ratified. And yet there is no mention of these cities in the document of peace (Thuc. V, 18–19).

There is left only one alternative, to agree with Busolt that the peace with Bottice was made in the year 422 soon after the alliance with Perdiccas, and the determination of this date explains both the absence of Spartolus from the Bottic alliance and the absence of the towns of the Bottic alliance from Thucydides V, 18, 5.

Benjamin D. Meritt

Brown University

Archaeological
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of America

ATREUS AND AGAMEMNON

THE discoveries by Emil Forrer [1] of references in the Hittite records at Boghaz-keui to Troy and to a great kingdom of Achaia and its rulers from 1350 B.C. to 1225 B.C. are of the utmost value and interest to all Homeric scholars. It appears that in the time of the Hittite king Morsilis, B.C. 1337–1312, an Achaian king, whose name is interpreted as Eteokles, held Pamphylia in fee from the Hittite empire. His father was Antaravas = Andreus. In 1225 a king of Achaia, whose name is Attarsijas, which is recognized by Forrer as Atreus, is active about the southwest coast of Asia Minor, expels the king of Caria and is soon after expelled in turn from that land. With another chief—the two are called kuirvanas = κοίρανοι—Attarsijas laid waste Cyprus in 1225.

I have taken the account given above from the *Historische Zeitschrift*, 1924, p. 343. So far as I know, it has not been noted that in the eleventh book of the Iliad the son of Atreus, who devastated Cyprus in 1225 B.C., received from Cinyras, king of Cyprus, a token of friendship and alliance—ξεινήιον—which was a breastplate of splendid metal work, described, in twenty lines of the poem, *Il.* 11, 24 ff. It is highly significant that the king of the rich and powerful island sends a piece of armour and not soldiers to the son of Attarsijas. The word ξεινήιον is also significant and may perhaps be contrasted with the word δῶρα, used in *Iliad* 23, 297 of a gift made by another prince who shirked service at Troy, but sent a present of propitiation. This was Echepolus of Sicyon, son of Anchises, who sent a mare as a gift to Agamemnon, in order that he might not have to follow him to windy Troy.

The Cinyradae were for many centuries priest-kings in Cyprus. They were dedicated to the service of Aphrodite and their wealth was a proverb among the Greeks. Pindar writes (*Nem.* 8, 161 ff.) of the prosperity which once in Cyprus-of-the-Sea loaded Cinyras with riches, and of the love of gold-haired Apollo for the priest Cinyras, beloved (κτίλον) of Aphrodite (*Pyth.* 2, 16 ff.).

A fragment of Theopompus states that the Greeks with Agamemnon came to Cyprus, got possession of the island and drove out Cinyras. Although Agamemnon in the eleventh book of the Iliad put on the beautiful gift of the Cyprian king, applauded by two goddesses, it may be that he cherished resentment against Cinyras for not appearing in person to fight under the walls of Troy. And political friendships and enmities have always been shifting things.

[1] "Vorhomerische Griechen in den Keilschriefttexten von Boghazköi", *Mitt. Or.—Ges.* Nr. 63, March 1924.

Since the father, or predecessor, of Cinyras was attacked by the father of Agamemnon, it is quite according to the nature of warrior kings that after a short respite of friendship or acquiescence, marked by the sending of Cyprian metal work to the Achaian king, who was besieging an old friend of the Cyprians, the conqueror should turn against the rich island, always a spoil of war.

Grace H. Macurdy

Vassar College

A BYZANTINE STATUE IN MEGARA

The statue illustrated in Figure 1 is in the court of the schoolhouse at Megara; through the courtesy of Mr. Keramopoullos I am permitted to publish it. The plinth is 0.58 m. wide, 0.35 m. deep and 0.08 m. high. The figure as preserved is 1.55 m. high; the width at the shoulders is 0.52 m. and the greatest depth *ca.* 0.35m. The head, neck, right arm from slightly below the elbow, and outer half of the right upper arm are lacking. The surface is more or less broken

A B

Figure 1. Statue in Megara

away all along the right side and is everywhere much worn, probably by the action of water. The feet, set far apart, point straight forward and are equally advanced. The outer garment is a long chlamys of heavy material, which is clasped on the right shoulder and falls in straight folds to the feet. Under it there was undoubtedly a tunic, though the statue is so much weathered on the right side that the tunic is nowhere clearly discernible. A ridge slightly below the level of the knee, visible in Figure 1a, doubtless marks the end of the tunic. The right forearm did not touch the chlamys and must have extended almost straight to the front. The left hand, swung forward slightly, is covered by the chlamys. The forms of both legs are perceptible through the garment. The vertical folds of the chlamys are few, shallow, and fairly regular. In the groove between the body

and the left arm are curved folds, almost parallel but fairly naturalistic; some of them start from the right shoulder. The back is virtually smooth, but this may be due partly to weathering.

The resemblance between this statue and the four figures at Corinth [1] is obvious; this is another example of early Byzantine sculpture. The singular treatment of drapery in Nos. 3 and 4 at Corinth, which I ascribed to the influence of mosaic, does not appear in the new figure, and the lower part of the figure, with the legs modelled under the garment, is very different from the corresponding parts of the two statues at Corinth: it is evident that the new statue is considerably earlier. It is probably earlier also than No. 2 at Corinth, though this is not so clear and the difference may be largely in quality. It should be noted however that the right forearm, which adheres to the body in Nos. 2 and 3 at Corinth, was entirely free from it in the new figure. Yet the general position is only slightly less stiff than that of No. 2 or No. 3.

An earlier group of statues wearing the same costume consists of two in Constantinople [2] and one in Ravenna.[3] The former two have been assigned to the last quarter of the fourth century. They show much less constraint in posture than the Megara statue, and much more classical style in drapery: the folds are deeper, giving more play of light and shade, and are far less regular and more naturalistic in their arrangement.

R. Delbrück has very courteously sent me, in response to my request, a description of the figure in Ravenna (Fig. 2), which will be fully discussed in his *Ikonographie der altchristl. Kaiser von Konstantin bis Heraklius.* From him I learn that the right hand does not hold a handkerchief, as I had thought from the drawing in Reinach, but the hilt of a sword; the object below the right hand is merely a support. The right leg is bent and the foot was set back. This statue is probably earlier than the two in Constantinople, but only slightly earlier. So far as can be judged in its present condition, it shows rather more Byzantine rigidity than they; but the sleeves and some other parts of the garments are rendered in a less conventional manner. On the other hand it shows a greater departure from classical style in drapery than appears in the *paludamentum* of the porphyry bust at Cairo, [4] which is probably a portrait of Maximinus

[1] *A.J.A.* XXVIII, 1924, pp. 253–265.

[2] Mendel, *Catalogue des Sculptures*, II, nos. 507 and 508; no. 507 also in Wulff, *Altchristliche u. Byzantinische Kunst*, p. 153, fig. 147 and in Rodenwaldt, *Griechische Porträts aus dem Ausgang der Antike* (Berlin Winckelmannsprogramm no. 76, 1919), p. 15, no. 9, fig. 5; no. 508 also in Rodenwaldt, *op. cit.* p. 15, no. 8, figs. 3–4. Cf. *A.J.A.* XXVIII, 1924, pp. 257f.

[3] Reinach, *Répertoire de la Statuaire*, III, 180, 1; Conway, in *Burl. Mag.* XXII, 1912, pp. 147–153 and fig. B. Cf. *A.J.A. l.c.* Fig. 2, above, reproduces a photograph by L. Ricci, Ravenna. S. Reinach kindly showed me the print from which the drawing in the *Répertoire* was made.

[4] Dalton, *Byzantine Archaeology*, p. 126, with citations; Delbrück, *Antike Porträts*, pl. 54.

(305–314). The statue is evidently a masterpiece of its kind: the mastery of the difficult material (porphyry) is complete, and the figure possesses the rigid dignity which was to be characteristic of Byzantine art without the lifeless stiffness of the statues at Corinth.

FIGURE 2. PORPHYRY STATUE IN RAVENNA

The head doubtless resembled the heads of the two statues in Constantinople, which Rodenwaldt justly calls "Werke ersten Ranges," rather than Constantinian heads or the bust of Maximinus.[1]

The statue at Megara, then, is later than the three figures at

[1] Conway suggests that the head identified by Delbrück as Justinian II (*Röm. Mitt.* XXIX, 1914, pp. 71–89) may have belonged to the statue. The identification of the head can scarcely be questioned, and the Ravenna torso is in all probability much earlier.

Constantinople and Ravenna, and earlier than the last three at Corinth. Its relation to No. 1 at Corinth is not so clear; the chlamydes are of different weight and comparison is difficult. In the arrangement of the folds, however, No. 1 is still classical, and the new statue is probably later. It was doubtless made very late in the fifth century.

Although my article on the statues in Corinth was written in June, 1923, I had no opportunity to revise it before publication; this was due to my absence from America. Minor changes and additions are not in order now, but an error or two may be corrected. The diptych of Clementinus does not contain any example of the chlamys on a complete figure. Mr. W. Stuart Thompson has kindly examined the basis of the Theodosian obelisk, and states that there are no remains of a crown on the heads of the figures supposed to represent the wife of Theodosius. The deceptive appearance is due to weathering. He felt no doubt, however, that these figures were female.

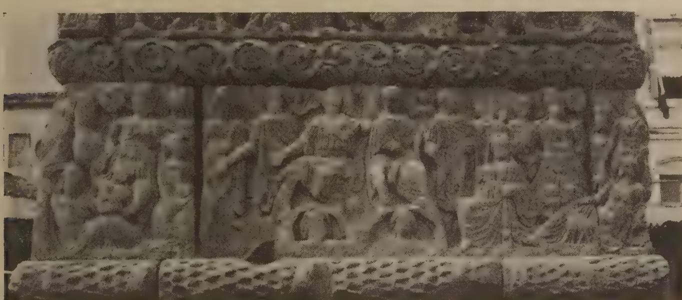

FIGURE 3. RELIEFS ON THE ARCH AT SALONIKI

Among early occurrences of the costume of our statues, the arch at Saloniki[1] might have been mentioned. The arch is usually thought to commemorate a campaign of Galerius; at all events it belongs to the beginning of the fourth century. The group in Figure 3 lends itself to comparison with the groups on the basis of the obelisk, and the difference in style is great. If the sculptures of the basis are compared with those of the arch, on one hand, and with the disc of Theodosius in Madrid, on the other, there surely can remain no doubt as to the period to which the basis belongs.

F. P. JOHNSON

UNIVERSITY OF ILLINOIS
URBANA

[1] *B.C.H.* XLVI, 1920, pp. 5–15 (Hébrard), with citations.

Archaeological
Institute
of America

NICOSTHENES: HIS ACTIVITY AND AFFILIATIONS

The article which follows is based on a study of the work of Nicosthenes that the writer was inspired to make, as the result of the acquisition by the Rhode Island School of Design in Providence of an amphora of the shape usually believed to be his invention, in the summer of 1923 (Fig. 1).[1] This was undoubtedly one of the most important acquisitions in the field of Classical Art made by any American museum during the year; for up to that time, only one complete amphora of this type existed, as far as I know, in this country—the one in Baltimore, so ably published by David M. Robinson in this Journal.[2] Not only is this vase in absolutely perfect preservation, but in the execution of the principal design it gives an impression of daintiness and lightness quite foreign to the heavy, clumsy, coarsely drawn boxers, which adorn the neck of the Baltimore vase. In height it stands about 30 cm., which is almost precisely the normal height.[3]

This vase was found at Caere in Etruria, in excavations conducted by Calabresi in the end of 1865 or the beginning of 1866, and almost immediately passed into the hands of Alessandro Castellani, the great antiquarian and collector. It was found in company with three other signed amphorae of Nicosthenes of this shape, two of which are now reported to be in the Stewart-Hodgson collection in London, while the third has disappeared.[4] While these amphorae were still in Castellani's possession and apparently not long after their discovery they were seen and reported on by Helbig in a communication to the Instituto di Corrispondenza Archeologica.[5]

The next appearance of this vase is in the sale of the Paravey collection which was dispersed in Paris, at the Hôtel Drouot, in 1879. In the sale catalogue (written by the Baron de Witte) it bears the number 22. As is well known, by far the greater number of the best vases in this collection passed to the Louvre; and it is something of a mystery why this vase was allowed to escape; for the other signed specimens from this collection, namely the charming cyathus by Theozotus and the Eos and Memnon cylix by Duris, both found their way there. It may be, however, that the Louvre authorities

[1] There is a short account of this amphora in *B. R. I. Des.* XII, 1924, pp. 11–12, and fig.

[2] XXVI, 1922, pp. 54–58.

[3] An average taken of the thirty-two signed amphorae of this form whose heights are given in Dr. Hoppin's newly published *Handbook of Greek Black-Figured Vases* (which will be referred to as Hoppin, *B.F.* in this article) yields the figure 30.125cm.

[4] These vases are Hoppin, *B.F.* 24,* 25,* 31* (the Providence vase), and 79,* under the name Nicosthenes.

[5] In the *Bull. dell' Inst.*, 1866, p. 182, nos. 1–4. This vase is no. 1 of that group.

felt that they were already supreme in the field of Nicosthenes's work, with the fifteen signed amphorae of this type from the Campana collection, already at that time in their possession.[1]

At the Paravey sale, or shortly afterwards, this vase was purchased by Mme. E. Darthès of Paris and, while in her possession, it was

FIGURE 1. AMPHORA BY NICOSTHENES IN PROVIDENCE

drawn and published in the *Wiener Vorlegeblätter*.[2] It was still believed to be in the possession of Mme. Darthès, or her descendants, at the time that Dr. Hoppin was gathering material for his *Handbook*

[1] Pottier's *Album des Vases Antiques du Louvre* yields the following information regarding Paravey vases in the Louvre—in each case the Paravey number comes first, with the Louvre number in parentheses: 7 (F75), 9 (F70), 10 (F166), 11 (F25), 23 (F69), 25 (F345), 32 (F118), 32 (repeated: F366), 41 (G180), 50 (G240), 55 (G436), 56 (G442), 62 (G428), 65 (G402), 75 (G471), 77 (G266), 79 (G35), 80 (G108), 81 (G271), 82 (G115), 87 (G149), and 89 (G384). There are also in all probability other unpublished examples from this collection there.

[2] 1890–91, pl. I, 7; pl. II, 5, a–b.

of Greek Black-Figured Vases, for he lists it as being in her collection;[1] but as a matter of fact it seems to have passed through other hands before it came into those of the dealer Feuardent by whom it was sold to the Rhode Island School of Design.

The main design of the vase is on the shoulder and consists of two horsemen, riding towards the right, with three male figures on either side of them, repeated on both sides of the vase. In each group of standing figures one is nude and the other two are draped in long chitons and himatia. Of the riders on side A, here illustrated, the one at the right is nude and his horse has a white mane and tail; on side B both riders wear short chitons. Between the two riders, in each case, flies a bird.

The shoulder, on these amphorae, is a favorite place for decoration, and we find in a large proportion of the vases of this shape signed by Nicosthenes, that it is ornamented with a design of figures, sometimes relatively meaningless, as here, sometimes with a scene from mythology (the favorite being Heracles and the Nemean Lion) or a scene of combat.[2]

Riders are common on vases signed by Nicosthenes in the black-figured technique and an examination of the riders figuring on other vases signed by him shows many parallels with the vase in Providence. The closest appears to me to be on the neck of an amphora of this shape in the Louvre, no. F101 (Hoppin, 34*), where the horseman is shown in almost the same manner as on our vase except, of course, that owing to his position he is much larger. Other close examples may be found on the following amphorae: on the body of Louvre F100 (Hoppin, 33 *); on the body of Louvre F109 (Hoppin, 42 *); on the shoulder of Vatican 451 (Hoppin, 62 *); on the shoulders of Vatican 526.2 (Hoppin, 64 *); and on the shoulder of Vienna, Oesterreichisches Museum[2] 231 (Hoppin, 67 *). Of the lost or inaccessible vases there seem to be close parallels on two of the vases found at the same time with this imphora, one of which is in the Stewart-Hodgson collection and the other of which is lost (Hoppin, 25 * and 79 *) and several others which have disappeared. Of vases of shapes other than the amphora there is a very close parallel in the exterior of a cylix in Berlin, no. 1805 (Hoppin, 5 *).

Our principal interest is intended to centre in these riders, the

[1] The vase was acquired by Providence too late to be properly listed in Dr. Hoppin's Handbook; but the correct location of the vase is given in an Addenda slip, inserted at the beginning of the book.

[2] An analysis of the fifty-three known signed amphorae of Nicosthenes of this shape, for the decorations, yields the following results—design on shoulder only, Hoppin, *B.F.* 13,* 31* (this vase), 43,* 44,* 45,* and 83.* The following have their principal design on the shoulder: 12,* 32**bis*, 38,* 39,* 40,* 41,* 60,* 62,* 63,* 64,* 66,* 75,* 77,* and 78.* The following have designs on the shoulder of no greater importance than the other designs: 9,* 18,* 19,* 24,* 25,* 32,* 36,* 37,* 55,* 56,* 61,* 67,* 74,* and 79.* The other amphorae do not figure in this analysis, having no special shoulder design.

other figures being supplementary and unimportant; and indeed they are worth looking at. The horses are lovely, dainty, high-stepping creatures, to ride which would be a joy. The delicacy with which they are rendered recalls the work of Execias (although, of course, not by his hand) who, as will be remembered, delights in horses, all three of his signed amphorae showing them. Of course in artistic skill the work of Execias leaves these far behind, but we see almost the same method of presentation—the long, delicate legs, the high, arching neck and head with the stiff, hogged mane; the deep barrel and curved back, fitting the rider, who sits his horse high and close to the neck. Markedly different from Execias, however, is the treatment of the tail: in our vase it is rendered with one long, thick brush-stroke, as indeed is the case on all of the vases of Nicosthenes that show riders; while with Execias, so delicate and meticulous is the incised line drawing that each hair of the tails of his horses seems to stand out.

NIKO≶ΘENE≶
ΕΓΟΙΕ≶ΕΝ

FIGURE 2. DESIGN ON HANDLE AND SIGNATURE—AMPHORA BY NICOSTHENES IN PROVIDENCE

Of decorative patterns our vase offers many. The handles and rim are ornamented with ivy-leaves (Fig. 2), single on the lip, double on the handles. As a handle ornament, this appears on only one other Nicosthenes amphora, Vatican 526.3 (Hoppin, 65 *). Not only can I find it in this position on no other vase of Nicosthenes, but in execution it is far less carefully done on the Vatican amphora than on ours.[1] As a body pattern, it appears on a large number of vases; the amphora in Baltimore, Brussels E389, British Museum B297, Louvre F104, F108, F110, and an amphora in the Petit Palais, Paris (Hoppin, 3,* 9,* 19,* 37,* 41,* 43 * and 55 * respectively). Of all these, the pattern is most carefully rendered on the amphora in Baltimore, with the example in the Petit Palais next. The others are careless.

On the neck is a pattern made up of double palmettes and a very rudimentary lotus, connected by a chain of tangent rings. This is not a common neck pattern and I can find a similar design on the neck of only one other vase, an amphora in the Louvre, no. F110 (Hoppin, 43 *) where, however, there is this slight difference—that the palmettes are enclosed at top and bottom by an arc, springing

[1] Hoppin erroneously states that it is to be found in this position on the amphora in Baltimore (*B.F.*, p. 179, no. 3*). In publishing the vase, Robinson states that the handles are decorated with a ray pattern. See *A.J.A.* XXVI, 1922, p. 56.

from lotus to lotus. This is not found on the Providence vase, but otherwise the pattern is essentially the same. It appears on side A of the shoulder of Louvre F109 (Hoppin, 42 *) and on the body of Louvre F113 (Hoppin, 46 *) where the lotuses are a little more developed. Outside of the amphorae, it seems to appear on the neck of the volute crater in the British Museum B364 (Hoppin, 20 *) just above the principal design. It also appears on an amphora in the Petit Palais (Hoppin, 56 *). This same pattern, but with the lotus fully developed, can be seen on the following vases; Louvre F108, F111, F112, and an amphora in the Conservatori Palace in Rome (Hoppin, 41,* 44,* 45,* and 60 *); in each case this design is on the body.

Below the shoulder, and between the two low ridges on the body is a single palmette design, of what Hoppin calls the "palmette cable" pattern. The palmettes spring from dotted circles, arranged tangent to each other, while between every pair of palmettes, and rising from the point of contact of the circles, a high tongue pattern (itself probably a very debased lotus) rears itself. This pattern is not to be found exactly as here on any other published Nicosthenes vase known to me, although a pattern very like it appears on the lower body of Vienna, Oesterreichisches Museum 231 (Hoppin, 67 *), and although in a much more mannerized form than here it appears on the following amphorae; one in Castle Ashby, British Museum B296, Louvre F107, F111, one in the Petit Palais, one in the Conservatori Palace in Rome, and Vatican 451 (Hoppin, 13,* 18,* 40,* 44,* 56,* 60,* and 62 * respectively); of these vases this pattern appears either in the same place as here, or on the lower body. In an addorsed form it is to be noted on the shoulder of side B, of Louvre F109 (Hoppin, 42 *).

Below this palmette decoration is a zigzag pattern in red on black, also a very rare ornament, being found in this position only on the Baltimore amphora and, outside of these two vases, only once more when it forms the inside rim decoration of Louvre F113 (Hoppin, 46 *). As is practically always the case, a band of rays is placed at the junction of the vase with the bell-shaped foot. Under one handle is the signature ΝΙΚΟΣΘΕΝΕΣ ΕΠΟΙΕΣΕΝ.

A proper study of the activity of Nicosthenes has only just been made possible by the appearance of Dr. Hoppin's handbooks, especially that of *Black-Figured Vases*. It is the principal purpose of this article to analyze, as far as possible, the work of Nicosthenes, by means of the information brought together in these books, and his affiliation with other potters and painters of the period.

Nicosthenes is popularly supposed to have been the inventor of the peculiar metallic shape of amphora, of which this vase in Providence is an example. I think that the facts do not entirely justify this and

that it can be proved that he merely developed a form already in existence.

To establish this theory, let us analyze the provenances, as far as known, of the amphorae of this shape that are identified with Nicosthenes, or with his period. They are almost all black-figured, but one in the "mixed technique" and two red-figured examples are also known. Of the black-figured, fifty-three with the signature of Nicosthenes have been listed, thirteen of which have disappeared. In addition, there are at least four unsigned specimens.[1] The examples with red figures bear in each case the signature of Pamphaeus, and that in the "mixed technique" is unsigned.

We have no definite information as to the provenance of twelve of the signed and three of the unsigned black-figured amphorae. The fifteen signed amphorae in the Louvre, the fourth unsigned amphora (also in the Louvre) and the two red-figured amphorae by Pamphaeus (also in the Louvre) are stated to come "from Etruria"; while every other black-figured vase of this shape, as well as the vase in the "mixed technique," is said to have been found at Caere. It is especially interesting to note that no other definite site is connected with these amphorae.

Carrying our analysis still further, we find that the vases of this shape, both black-figured and red-figured, in the Louvre, to which the indefinite provenance "Etruria" is given, came from the Campana collection. It seemed essential, therefore, to undertake, as far as it was possible with the information already published, an analysis of the provenance of all of the Campana vases; and, curiously enough, the result obtained showed that where any definite finding-place was given (which is not as often as one could wish) an overwhelming proportion seem to have come from Caere! This, of course, does not prove that these particular vases are from that site; but, combined with the fact of Caere being the only definite finding-place mentioned for the amphorae of this shape where a provenance is given, it makes the probability very strong that they, too, should be assigned to that place.

It is possible, moreover, to deduce from what we already know where at least three of the amphorae, the provenances of which are not given, were probably found. These are (1) the vase in the Conservatori Palace in Rome (Hoppin, *B.F.* 60 *) which undoubtedly belonged at one time to Castellani, and which, therefore, probably came from Caere, as his excavations were chiefly there; (2) an amphora in the Vatican which is associated with two others known to have come from Caere (526.2; Hoppin, 64 *); and (3) a lost vase

[1] There is one unsigned amphora of this shape in Brussels, of the existence of which Dr. Hoppin was unaware when he brought out his *Handbook of Black-Figured Vases*. I saw it, and took notes on it, in the Musée du Cinquantenaire in the summer of 1923.

known to have belonged at one time to Calabresi, a name associated only with Caere (Hoppin, 73 *).

To recapitulate:—there are fifty-three amphorae of the so-called "Nicosthenes shape" that bear his signature. Of these, twenty-six, or nearly one-half, were found at Caere; and of the remaining twenty-seven, eighteen, or two-thirds, show every indication of having probably come from the same site. Furthermore, as a result of the publication of Dr. Hoppin's handbooks, we can state with absolute certainty that no other site is known to have yielded these vases.

These facts, as I interpret them, lead to but one conclusion; that these amphorae were made for the Caeretan market and to satisfy a local demand. If this conclusion be accepted, it stands to reason that vases of this shape existed before the activity of Nicosthenes began, and that we may no longer look upon him as the inventor of this form, but as the developer of a form already in existence.

It is only fair, however, to see if this theory can be supported by any other evidence, and if we can confirm it by producing any vases of this shape that may be said to antedate the activity of Nicosthenes. If not, our conclusions will be weakened, if not absolutely destroyed; if so, the probabilities for this idea being correct are considerably strengthened.

Strangely enough, with all the material existing in the museums of Europe, it is to an American collection that we must turn for the confirmation that we desire. This is a vase now in the University Museum in Philadelphia, an amphora of the "Nicosthenes shape," said to have been found on one of the Greek Islands, probably Samos or Chios; and at one time it had been in the possession of Tewfik Pasha, Khedive of Egypt. Furtwängler, on seeing this vase during his visit to America in 1904, and in commenting on it later,[1] called attention to its resemblance to the class of vases known as "Caeretan Hydriae." This theory was later developed and the vase published by Professor Bates,[2] whose article shows the close resemblance to this class of vases, especially in the painted designs on the bell-shaped foot, a common feature of the "Caeretan hydriae."

Of the place of manufacture of these vases there is much doubt. The present tendency is to assign them to Clazomenae, and associate them with the painted terra-cotta sarcophagi from that site. We must not, however, lose sight of the fact that these hydriae have all been found at Caere, and that they have been found nowhere else; furthermore, that imitations of these hydriae, obviously Etruscan, exist. Dümmler, in proving the existence of these imitations, is considered to have proved the Ionic origin of the originals. But,

[1] *Münch. Sitzb.*, 1905, p. 255, no. 12.

[2] *Trans. Free Museum of Science and Art, Univ. of Penna.*, II, part II, 1907, pp. 155–157, and pl. XI. In the *Catalogue of the Mediterranean Section* of the University Museum, it will be found on pp. 62–63, no. 43.

while not disagreeing with him, I should like to call attention to two facts: (1) that none of these "Caeretan hydriae," or any vase of this peculiar and beautiful technique, have been found in any of the places in Ionia assigned as the place of their manufacture; (2) that this amphora in Philadelphia while admittedly not found in Etruria, the only vase other than a hydria assigned to this technique, is of the "Nicosthenes shape" with the same flat, metallic handles, and bell-shaped foot. Was it, too, like the hydriae, made for the Caeretan market and through some accident failed to reach its destination? Be that as it may, these vases are usually considered to antedate the black-figured ware of the period of Nicosthenes; so that the existence of this amphora proves that the shape was already known before his activity began; and it is rather significant that it should be found in a technique so intimately associated with Caere that very few examples are found at any other site.

But all this fails to answer the question that must occur to all who have had the patience to follow this argument thus far. Why was there this demand at Caere for vases of this shape? Is it because of the obvious imitation of metallic vases? Or is it because of an already existing shape in Etruscan pottery? I believe the latter to be the correct explanation. It is known that this is a common shape in bucchero ware; and, indeed, amphorae of this type seem to be found among the earliest wheel-made bucchero vases. Furthermore, Caere was a centre for the manufacture of the early period of this ware, although later eclipsed by Chiusi, the ancient Clusium. I publish here for the first time two bucchero amphorae of this shape in the University Museum in Philadelphia (Fig. 3), undecorated, and of uncertain provenance, but almost certainly of earlier date than the vases of Nicosthenes.

Let us now consider the amphorae of this shape in the mixed and red-figured techniques. The example in the former style is now in the Oesterreichisches Museum in Vienna. I must frankly admit that it is a puzzle to me. It has been published several times and, on the analogy of the two red-figured amphorae of this shape in the Louvre, is usually attributed to Pamphaeus;[1] but I fail to see that it has anything in common with any of the vases that have his signature, or with any of the work of the men who painted vases for him and whom I shall discuss later. Nor does it seem to me, apart from its shape, to have anything in common with the red-figured vases signed by Nicosthenes. Nevertheless, I firmly believe that it came from the atelier of Nicosthenes, although I am unable to place it.

As I have noted above, the two examples of this shape of amphora in the pure red-figured technique are both in the Louvre, where they

[1] For a bibliography of this vase (its number in Masner's catalogue is 319), see Hoppin, *R.F.* II, p. 309, no. 31 (under Pamphaeus).

have the numbers G2 and G3. Both bear the signature of Pamphaeus as potter.[1] And this brings up the fascinating question of the relationship of these two men—Nicosthenes and Pamphaeus—which I have always believed, and which now, thanks to the researches of Hoppin and Beazley, I think I can prove to have been that of partners with Pamphaeus the junior member of the firm.

It is now possible, thanks to the industry of Dr. Hoppin, to analyze the vases signed by the two men, in the black-figured, mixed,

Figure 3. Bucchero amphorae in Philadelphia

and red-figured techniques, and to note, if they exist, the points of resemblance.

Nicosthenes, as is well known, did not confine himself merely to amphorae. He has to his credit many other forms of vases in the black-figured style, especially cylices.[2] Six black-figured signatures of Pamphaeus are extant, four of which are cylices, and two are hydriae, a shape not found in the signed work of Nicosthenes. Of the eighteen signed cylices of Nicosthenes, six are of the "eye" type, to two of this type by Pamphaeus, while each has one cylix, undecorated save for a gorgoneion in the interior.

The six "eye" cylices signed by Nicosthenes are Florence 3888

[1] For bibliography, see *ibid.*, II, pp. 300–303, nos. 16,* 17.*

[2] The ninety-one signatures of Nicosthenes in the black-figured technique are divided as follows: fifty-three amphorae of peculiar shape, eighteen cylices, five cyathi, three each of phialae and oenochoae, two amphorae of ordinary shape, one each of scyphus, pyxis, volute-crater, and olpe, and three signed fragments.

(Hoppin, *B.F.*, Nicosthenes 15*); Munich 2029 (Jahn 1098; *ibid.*, 25**bis*); New York 14.136 (*ibid.*, 26*); Louvre F121 (*ibid.*, 50*); Louvre F122 (*ibid.*, 51*); and a cylix in Rouen (*ibid.*, 66**ter*). The two by Pamphaeus are Louvre F127*bis* (*ibid.*, Pamphaeus 4*), and one in the Vatican (*ibid.*, 5*).

Of the vases of Nicosthenes, those in Florence and Munich are of no use, as they show subjects which have no parallels in the work of Pamphaeus; and Louvre F121 must also be discarded, as a very large portion of this vase is modern. The investigation limits itself, therefore, to a comparison of the two "eye" cylices of Pamphaeus with those of Nicosthenes in New York and Rouen, and Louvre F122. A careful study of these vases has led me to the belief that they are by the same hand. I am also inclined to believe that the two cylices with nothing but a gorgoneion in the interior for decoration, the one by Nicosthenes in the Cabinet des Médailles (Hoppin 29*) and the one by Pamphaeus in Madrid (Hoppin, Pamphaeus 2*) are also by the same hand.

Turning to the other vases in the black-figured technique, I note certain resemblances in the drawing on the volute crater by Nicosthenes in the British Museum (B364; Hoppin, Nicosthenes 20*) to that on the hydria signed by Pamphaeus in the same museum (B300; Hoppin, Pamphaeus 1*). But the horses in the quadriga in the hydria signed by Pamphaeus in the Cabinet des Médailles (254; Hoppin, Pamphaeus 3*) show, in my opinion, to a marked degree the influence of the school of Execias. This would perhaps suggest that Pamphaeus, or his painter in the black-figured style,[1] had started learning his trade in the atelier of Execias, and then later had become associated with Nicosthenes.

But it is in the red-figured technique that the most important evidence concerning the relations of Nicosthenes and Pamphaeus is to be found. Two vases in the mixed technique and five in the red-figured, bearing the former's signature as potter, are extant, while the bulk of the work of the latter is in the later styles, one signature in the mixed, and twenty-seven in the red-figured technique being known, of which five vases have disappeared.

	B.F.	*Mixed*	*R.F.*
Nicosthenes	91	2	5
Pamphaeus	6	1	27

This shows that Pamphaeus was distinctly the younger man of the two.

Now what painters are employed by the two men? The re-

[1] K. McK. Elderkin in her article on Chachrylion (*Harvard Studies in Class. Phil.* xxxv, 1924 pp. 80–81) makes a good case for the black-figured potter being the painter of his own vase. It may very well be that Pamphaeus painted his own hydriae.

searches of Beazley and Hoppin come to our aid here, and the results obtained reveal an extraordinary parallelism. Of the seven vases of the mixed and red-figured styles signed by Nicosthenes, two bear the joint signature of Epictetus as painter, and four of the five remaining can be attributed. Of the vases of Pamphaeus, two likewise bear the joint signature of Epictetus as painter, and Beazley attributes to other masters eleven others. Of the remaining signatures of Pamphaeus, three are too fragmentary to attribute, and five, as mentioned above, have disappeared. This leaves one of the red-figured vases of Nicosthenes and seven of those of Pamphaeus which have not been attributed to a painter by Beazley.

Besides Epictetus, Beazley gives to Oltus one cylix in the Louvre in the mixed technique (F125; Hoppin, *R.F.* II, pp. 228-229, Nicosthenes 4 *) signed by Nicosthenes, and of Pamphaeus a cylix of similar mixed technique in Bonn (Hoppin, *B.F.*, p. 469; *R.F.* II, pp. 280–281, Pamphaeus 3 *), the two red-figured amphorae of the so-called "Nicosthenes shape" (if the results of this article be accepted, perhaps a better name would be "Caeretan amphorae") in the Louvre (G2, G3; Hoppin, *R.F.* II, pp. 300-303, Pamphaeus 16,* 17 *) and the stamnus with Heracles and Achelous in the British Museum (E437; Hoppin, *op. cit.* II, Pamphaeus 10 *). To an artist whom he calls "the London Death and Sleep Painter" he attributes three of the red-figured vases of Nicosthenes, namely the cylix in Berlin (2324) and the two canthari in the Museum of Fine Arts in Boston (95.61 and 00.334).[1] To this same painter he gives four red-figured cylices of Pamphaeus; one in the Northampton collection at Castle Ashby, two in the British Museum (E12 and E815) and one in Petrograd (Stephani 828).[2] In addition, to a third painter to whom he gives no name, but who is closely allied to the "Death and Sleep Painter," he assigns three more vases of Pamphaeus, cylices in Corneto-Tarquinia, the British Museum (E11), and Munich (Jahn 439).[3] For convenience, we shall refer to this master as the "Painter of the Corneto Cup." Therefore the situation is as follows, according to Beazley:

	Nicosthenes	*Pamphaeus*
Epictetus	2 (1 mixed)	2
Oltus	1 (mixed)	4 (1 mixed)
Death and Sleep Painter	3	4
Corneto Cup Painter	–	3
Unattributed	1	15[4]
Totals	7	28

[1] Hoppin, *R.F.* II, pp. 224–227, Nicosthenes 1*–3.*
[2] *Ibid.*, II, Pamphaeus 6,* 9,* 12,* and 18.*
[3] *Ibid.*, II, Pamphaeus 7,* 8,* and 14.* For the last, see also *B.F.*, pp. 470–471.
[4] Of these five are lost and three too fragmentary to assign.

To the attributions of Beazley I should like to add some of my own. With great diffidence I should add to the work of the "Painter of the Corneto Cup" two other cylices, one in Boston (95.32), and one in the British Museum (1907.10–20, 1).[1] This latter vase has an interior design almost identical with that of the cylix in Munich which must certainly be by the same hand; while the Boston cup shows many points of resemblance to the others. To the "Death and Sleep Painter" I am inclined to give the cup in Athens (Collignon-Couve 1156) and the recently discovered cylix in the Villa Giulia;[2] and I should like to assign to his hand also the cup in Cagliari,[3] but realize that the publication of this vase is altogether too inaccurate to justify such an attribution without seeing it. Therefore, in my opinion, the situation for the red-figured vases of Nicosthenes and Pamphaeus is as follows:

	Nicosthenes	*Pamphaeus*
Epictetus	2 (1 mixed)	2
Oltus	1 (mixed)	4 (1 mixed)
Death and Sleep Painter	3	6
Corneto Cup Painter	–	5
Lost	–	5
Too fragmentary to assign	–	3
Unassigned	1	3
Totals	7	28

The parallelism should be carefully noted. Nicosthenes employs no red-figured or mixed technique painter not employed by Pamphaeus; and, furthermore, the "Death and Sleep Painter's" work does not appear on any *signed* vases except those of Nicosthenes and Pamphaeus, although there are a few unsigned vases which Beazley has assigned to his hand. We have not as yet learned enough of the work of the Painter of the Corneto Cup to justify any statement as to his activity with other potters, but it would seem as though he confined his work to the atelier of Pamphaeus.

What is the situation with regard to Epictetus and Oltus? Let us first consider Oltus. As we have seen, one vase of Nicosthenes in the mixed technique and four vases of Pamphaeus, of which one is in the mixed technique, have been attributed to him. The name of Oltus is known to us only through his connection with the potter

[1] Hoppin, *R.F.* II, Pamphaeus 4* and 13.*

[2] *Ibid.*, Pamphaeus 1* and 19**bis*.

[3] *Ibid.*, Pamphaeus 5.* The scene shown in this cup is probably not, as Hoppin tentatively suggests, a man climbing a wall; it is more probably a man treading wine or oil in a vat; he grasps with his right hand a ring, something like one preserved in the University Museum in Philadelphia, published by McDaniel, *A.J.A.* XXII, 1918, pp. 295–303, who identifies it as a ring held by a worker, treading in a vat, to give himself support. Since writing this article the vase has been acquired by the Museum of Fine Arts in Boston. It is certainly not by the "Death and Sleep Painter."

Euxitheus,[1] as the only two vases that bear his signature are signed jointly with this maker. If Beazley is correct, however, in assigning vases of the mixed technique to him, bearing the makers' signatures of Nicosthenes and Pamphaeus, we may reach the conclusion that Oltus learned his trade under them, and from them went and joined forces with Euxitheus.[2] Before leaving him, let us note that Beazley believes that Euphronius was associated with Euxitheus on a crater in the Louvre (G33), the signature on which is probably that of the latter; which suggests that all of the vases of Euphronius signed with the ἔγραψεν formula, except the cylix in Munich, signed with Chachrylion, may have been made for Euxitheus, and that later he took over the factory of Euxitheus when he began to sign ἐποίησεν, —an attractive theory, but one impossible to prove.

The situation regarding Epictetus is somewhat more complicated. Apparently he is first associated with the potter Hischylus and started his career in that shop. This potter has been carefully, thoroughly, and capably studied by Walters,[3] whose article remains the authority for our knowledge of him. I believe that the statement made above can be proven by the evidence, for all the extant vases bearing the signature of Epictetus as painter and Hischylus as potter are in the mixed technique,[4] although one red figured cylix, now lost, was signed by both. After leaving Hischylus, he went, as I believe, to Nicosthenes and Pamphaeus, for each of whom he signs two vases.[5] In my opinion, the existence of a cylix in the mixed-technique signed jointly with Nicosthenes proves that it was to that atelier that he went after leaving Hischylus. There is great difficulty, however, in tracing his career after leaving Nicosthenes. We know that he was in business for himself at one time, for a signature of his with the ἐποίησεν formula exists in the National Museum at Athens,[6] and to this period undoubtedly the bulk of his work belongs; but he also signs vases for Pistoxenus [7] and Python,[8] and it is difficult to say when in his activity these vases belong. My own theory is

[1] For Euxitheus, see Hoppin, *R.F.* I, pp. 447–451; for Oltus, *ibid.*, II, pp. 247–262.

[2] If this is so then it can be stated that unsigned vases in the mixed technique attributed to Oltus were made for Nicosthenes and Pamphaeus.

[3] *J.H.S.* XXIX, 1909, pp. 103–119, pls. VIII–XII. Hischylus can be found in Hoppin, *B.F.* 137–139, *R.F.* II, 112–119.

[4] The vases signed by Epictetus and Hischylus are all cylices, and are: British Museum E3 (Hoppin, *R.F.* I, Epictetus 7*), Faina Collection, Orvieto, 97 (*ibid.*, Epictetus 16*) and Petrograd 645 (*ibid.*, Epictetus 23*). The red-figured cup is lost (*ibid.*, Epictetus 28*).

[5] The vases signed with Nicosthenes are a mixed technique cylix in Würzburg (358; Hoppin, *B.F.*, p. 462; *R.F.* I, p. 336, Epictetus 26*) and a fragmentary vase in Odessa, of the red-figured technique (Hoppin, *R.F.* I, pp. 320–321, Epictetus 15*). Those signed with Pamphaeus are both red-figured, both cylices, one of which is in Berlin (2262; *ibid.*, Epictetus 4*) and the other in the Louvre (G5; *ibid.*, Epictetus 19*).

[6] A1; *ibid.*, Epictetus 1.*

[7] A scyphus in the British Museum, E139, *ibid.*, Epictetus 14.*

[8] A cylix in the British Museum, E38, *ibid.*, Epictetus 10.*

that the vase signed with Python is the latest extant vase of Epictetus, as Python was also potter for Duris in three instances; and that the vase signed for Pistoxenus precedes his entry into business for himself.[1]

In any case, it is my belief that Epictetus and Oltus were at work for Nicosthenes and Pamphaeus before the "Death and Sleep Painter" or the "Painter of the Corneto Cup," and that, in all probability, the two latter artists did not begin to paint for the firm of Nicosthenes and Pamphaeus until after the departure of Oltus and Epictetus. We may also say with certainty that the "Death and Sleep Painter" antedated the "Painter of the Corneto Cup," as the latter's work is not represented on any of the red-figured vases of Nicosthenes. The facts that examples of their work on signed vases are confined to the products of Nicosthenes and Pamphaeus, and that otherwise the two men employ the same painters, seem to me very significant and indicative of the fact that a partnership existed between these two potters, and that after the death or retirement of Nicosthenes, Pamphaeus continued the business.

What was the ultimate fate of the business? It is inconceivable, in terms of modern thought, that a concern which had built up a trade extending from Panticapaeum on the Black Sea, and Naucratis in Egypt, in the East, to Caere in Etruria and Girgenti in Sicily in the West, should suddenly stop business; but with the limited information in our possession any attempt to answer this question would involve us in flights of fancy and conjecture, for which no definite proofs could be offered. A chart could be made (in the preparation of this article in the rough I attempted to do so, and it led so far afield that I decided to abandon the project) which would show all sorts of connections and ramifications that would bring in the most famous names in Attic red-figured ware, as more or less remotely connected with our firm but, having made the chart, nothing could be proven, except to show in a graphic way the close relationship between Nicosthenes and Pamphaeus, which has perhaps been sufficiently indicated in the text. One might, for example, advance the theory that, through Oltus, first Euxitheus and then Euphronius carried on the establishment; or with equal plausibility it might be suggested that when Epictetus signed with the ἐποίησεν formula, he was carrying on the business, which later was taken over by Python and that Duris eventually signs as painter for the successors to Nicosthenes and Pamphaeus. But these theories must be discarded, as there is no proof for them, or any evidence whatever to confirm or support them.

[1] The three vases signed by Python with Duris are a cylix in the Louvre (G121; *ibid.*, Duris 25*) and two cylices in the Oesterreichisches Museum in Vienna (324, 325; *ibid.*, Duris 30* and 31*).

What, then, can we prove regarding the activity and affiliations of Nicosthenes? Two things; first, that the amphora that bears his name was not his invention, but was developed by him and was probably made for the Caeretan market, and should therefore perhaps be more accurately called the "Caeretan amphora"; and second, that the evidence points very strongly to a partnership having existed between him and Pamphaeus at the end of the black-figured and beginning of the red-figured period, with the latter as the junior member of the firm.

Stephen Bleecker Luce

Brown University
Providence, R. I.

I wish to express my deep appreciation to the authorities of the Rhode Island School of Design for permission and encouragement to publish their amphora by Nicosthenes: and to the staff of the University Museum in Philadelphia for the photograph of the bucchero amphorae here published, and their permission to include it in this article.

APHRODITE WORSHIP ON A MINOAN GEM

NOT the least important chapter of Minoan archaeology is that of the gems and the seal impressions which obviously preserve scenes of religious character. The fascination of their study is increased by the fact that the meaning of the scenes is usually obscure. Among the many gems that represent sanctuaries and acts of worship, but at the same time unique in subject matter, is one to which this paper is devoted, a gem which has previously been described rather than interpreted (Fig. 1).

FIGURE 1. MINOAN GEM

It is a rock crystal lentoid from the Idaean Cave. Evans' description of it[1] is as follows: "A female votary is seen blowing a conch-shell or triton before an altar of the usual Mycenaean shape. Above the altar is seen a group of three trees apparently cypresses, and immediately in front of them the 'horns of consecration.' To the right of the altar is a rayed symbol, to the left is apparently another altar base, with a conical excrescence, and behind the votary another tree." The description is fairly adequate, though scant, but Evans' interpretation of the object at the left of the altar is open to question, and, moreover, he has made no attempt to explain the meaning of the scene.

Furtwängler[2] wrongly interprets the object in the hand of the votary as a large fruit to be presented as an offering. That Evans is correct in naming this a shell is clear from a clay seal impression[3] where two conch-shells of identically the same shape as the one on the gem are depicted. The curiously pointed object at the left of the altar Furtwängler calls a symbol which occurs frequently in Cretan writing. He was perhaps misled in this interpretation by the picture in the *Monumenti Antichi dei Lincei*[4] where the object has been drawn with a crossbar near the point.

This makes it slightly resemble a pictograph which Evans calls a mallet,[5] though the proportions are somewhat different. But with-

[1] *J. H. S.*, 1901, p. 141.
[2] *Antike Gemmen* III, p. 47, fig. 22.
[3] *B. S. A.*, IX, p. 56, fig. 34, and *Knossos* I, p. 696, fig. 518h.
[4] VI, p. 178, fig. 12.
[5] *Cretan Pictographs*, p. 306.

out the crossbar which does not occur in Evans' most recent publication of the gem [1] the similarity to the pictograph is entirely destroyed. Nor can the star be considered a pictograph, as the five-pointed star never occurs in Cretan linear script, though the six- and eight-pointed forms are common.

In my opinion there is represented on the gem the sanctuary of Aphrodite in her character as a fertility-goddess and a deity of the heavens and of the ocean. We know that Crete as well as Cyprus was a strong center of her cult, and she is so closely linked with the Mother Goddess, with Astarte and Ishtar as to be virtually the same deity under a different name. Her connection with the heavens—with the title Ourania—is eastern. Farnell [2] tells us that the star was seen occasionally on Assyrian monuments and was perhaps the symbol of the Semitic goddess. It is certainly the symbol of Ishtar on an Assyrian gem [3] where she appears heavily armed riding on the back of a lion, with a star on the top of her elaborate headdress. Aphrodite apparently ceased to be an important goddess of the skies in later Hellenic worship, but that she was still so considered in some localities is clear from a coin of Ouranopolis, on which Aphrodite Ourania appears clad in a long chiton and peplos, her head surmounted by a star.[4] Considering that Cretan worship was always strongly influenced by Oriental cults it seems safe to interpret the star on the Idaean gem as a symbol of Aphrodite Ourania. Though stars generally occur in the upper field of gems and cylinders, they do appear now and then in the lower corners.[5]

The trees behind the altar may likewise find their explanation in the cult of Aphrodite, as a vegetation-goddess. According to Hesychius trees were cut down and set up by the portal of the house as a dedication to Aphrodite, [6] and Lucian [7] tells us that at the festival of "the torch", in honor of the goddess of Hieropolis, large trees were erected in the courtyard of the temple. On the Cretan gem four trees occur, three immediately behind the altar and the other at the left. These may very likely stand within the sanctuary of the goddess.

Perhaps the most important object in the scene on the gem is that which is represented at the left of the altar. This I believe to be a primitive image of Aphrodite herself. The resemblance to the fiddle-shaped Cycladic figurines of Neolithic times is striking indeed. A number of these are pictured in Figure 2, some with long necks and no indication of heads, like the figurine on the gem, some with the waist

[1] *Knossos* I, p. 222, fig. 167 from which the figure used here is reproduced.
[2] *Cults of the Greek States* II, p. 629.
[3] Furtwängler, *op. cit.* I, pl. I, 10.
[4] *Brit. Mus. Cat., Macedon*, p. 133.
[5] Furtwängler, *op. cit.* I, pl. II, 35.
[6] Farnell, *op. cit.* II, p. 642.
[7] *de Dea Syria*, 49.

line and breasts clearly marked, others with only the slightest indication of human form. Number 12 of the series is little more than a conical stone with slightly concave sides. Numbers 3 and 14 are also very crude. In fact they suggest a development from a simple, pointed stone, such as number 2 (Fig. 2). The sacred character of curiously shaped stones among primitive peoples is well known, and the pointed stone was sacred to a superlative degree. Moreover, in historical times we find it particularly associated with Astarte. The conical stone appears on coins of Mallus as her symbol,[1] and on coins of Byblus it occurs within the temple as the divine image. A coin of Ouranopolis, already mentioned, shows beside the seated figure of

FIGURE 2. CYCLADIC FIGURINES

Aphrodite Ourania a conical stone capped with a star. The natural inference is that here Aphrodite is represented in two ways, in primitive aniconic form, and also as an anthropomorphic deity. The former has lost its original importance and been relegated to a subordinate position as a symbol of the goddess.

Farnell[2] considers it probable that in many localities the earliest representations of Astarte were aniconic. The question readily suggests itself whether the Cycladic figurines may have developed from natural stones of approximately conical shape which were first of all considered as sacred to the fertility-deity, and which, little by little, came to be actually identified with the deity. It would be a simple step, then, to conceive of a human goddess and to translate the conical stone into human form. Primitive man would easily think of the point of the stone as the head and neck, and the more bulbous por-

[1] Head, *Hist. Num.* p. 606.
[2] *Op. cit.* II, p. 670.

tion as the trunk of the body. Just as the conical stones had neither arms nor legs, so the earliest figurines are represented without extremities. Gradually a closer approximation to the human form was reached. The neck was shortened, the waist and breasts indicated, and eventually, with the addition of legs, the original conical form became less obvious. The early anthropomorphic stage in the representation of Astarte is possibly supplied by the large marble "idols" of female form from the Cyclades.[1] The fact that these "idols" include nude female forms with arms crossed below the breasts confirms the interpretation above given of the violin types as earlier representations of the fertility-goddess. Moreover, Astarte frequently appears nude in primitive times, as is attested by the terra cottas from Warka, where she is sometimes represented nude with her hands pressed against her breasts.[2]

The interpretation of the object on the Minoan gem as a primitive image of Aphrodite is further strengthened by the fact that such figurines have been found in Crete in Neolithic strata,[3] and in Evans' words "it is impossible in Crete to dissociate these primitive images from those that appear in the shrines and sanctuaries of the Great Minoan Goddess."[4] Additional proof that the goddess might be represented in the form of a primitive idol is supplied by a Cypriote cylinder where the rayed object at the right has been recognized, by Perrot and Chipiez[5] as a figurine of Astarte. If the primitive Cycladic figurines can be identified as Aphrodite, a possible explanation is furnished for the presence of numerous figurines in graves both in Phoenicia and elsewhere. In the Cypriote necropolis at Dali they have been identified as statuettes of Astarte.[6] There is some evidence of a mystery cult in Cyprus in which the image of the dead goddess was restored to life, and in Assyrian religion Ishtar, after her descent to hell, was rescued and sprinkled with the water of life.[7] What more appropriate for burial with the dead than figurines of the goddess whose resurrection may have suggested the possibility of a future life to mankind?

The fact that a Neolithic figurine appears on a gem of the Bronze Age need disturb no one, since primitive images would be likely to survive because of their highly sacred nature. Moreover, the conical form continued to be worshipped even under the Romans, as is seen on a coin of Byblus Struck by Marcrinus.[8] Other coins of Cyprus will demonstrate that the simple cone did not always occur, but

[1] See Fowler and Wheeler, *Greek Archaeology*, p. 43, fig. 1.
[2] Frazer, *Paus.* II, p. 129.
[3] *Knossos* I, p. 49, and *Cretan Pictographs*, p. 125, figs. 124, 125 and 126.
[4] *Knossos* I, p. 52.
[5] *Histoire de l'Art dans l'Antiquité* III, p. 639, fig. 432.
[6] Babelon, *Manual of Oriental Antiquities*, p. 260.
[7] Farnell *op. cit.* II, p. 651.
[8] Per. and Chip. *op. cit.* III, p. 60, fig. 19.

that modified forms were likewise in use. Some show, as the temple image, a conical base with rudimentary arms and head;[1] and incidentally furnish excellent evidence for the theory that the human representation of the deity developed slowly from the aniconic form, and that images of Aphrodite in all stages of development might be worshipped contemporaneously.

To return to the gem (Fig. 1) the votary with the conch-shell deserves some consideration, because this figure throws additional light on the significance of the subject. Shells were frequently used in religious rites, particularly the conch-shell trumpet, for Evans has found specimens of these both at Phaestus and Cnossus,[2] and his interpretation that they were used in religious ceremonies to summon the divinity seems plausible. I should like to go one step further and limit the use of the conch-shell trumpet to divinities of the ocean. It is particularly appropriate to Aphrodite as a goddess of the sea, ἀφρογενής. Moreover, numerous cockle-shells, the type associated with Aphrodite in Greek art, have been found in Minoan sanctuaries, especially in the shrine of the Snake Goddess at Cnossus, where they seem to serve the purposes of cult rather than of decoration. Triton shells have also been found in Mycenaean beehive tombs in Crete.[3] Can it be that they allude, as do the figurines found in tombs, to Aphrodite in her cthonic aspect?

This raises the question whether Aphrodite was a divinity of the sea in Minoan times, since the actual evidence of her connection with the sea is late. Herodotus[4] tells us that the oldest sanctuary of Aphrodite Ourania was at Ascalon. In this sanctuary, which stood on the banks of a lake, full of fish, the goddess was represented as a woman from the hips upward, but as a fish from the hips downward.[5] Here and throughout Syria fish were sacred to her. She was from very early times, then, a goddess of the water, perhaps first of the stream. However, the transition from stream to sea would be easy so soon as her worship was transferred across the sea to the inhabitants of the islands, such as the Cretans. The fish is the symbol of the Cretan Goddess on a bronze votive tablet from the Psychro Cave[6] where it appears together with the dove. This same tablet bears further marks of identification, the rayed disk and the moon, the usual marks of Aphrodite Ourania, thus combining the ideas of sky, air, and water. Here the sacred fish of Aphrodite would readily suggest the ocean, even though the goddess may not in the earliest

[1] Per. and Chip. *op. cit.* III, p. 266, fig. 199.
[2] *Knossos* I, p. 221.
[3] Evans, *J. H. S.* 1901, p. 142.
[4] I, 105. It is interesting to note in this connection that at Philistine Ascalon pottery of distinctly Mycenaean type has been found, showing close relationship between the two regions. See E. Saussey *Syria* V, 1924, pp. 171-185 and pl. XLIII.
[5] Frazer, *Paus.* II, p. 130.
[6] Evans, *Knossos* I, p. 632, fig. 470 and p. 635.

instance have been conceived as a sea-deity. A shell is as suitable to the Cretan Goddess as is the fish, and appears in Greek art with Aphrodite to suggest her birth from the sea. The most famous example of this subject is the painting of Apelles. In Hellenistic art the shell and the dolphin are interchangeable attributes of Aphrodite. Certainly the shells in the shrines at Cnossus are to be associated with the sea, for they are in no way appropriate to streams and lakes. The more one studies the development of Greek religion the clearer does it become that its origins must be sought in the remotest antiquity, and that the continuities are virtually unbroken.

In Greek times Aphrodite's association with the sea is undisputed. At Hermion was a temple of Aphrodite, surnamed the Goddess of the Deep Sea and Goddess of the Haven.[1] On the Throne of Zeus, Aphrodite was represented rising from the sea.[2] The supposition is that this subject was by no means a new departure. Certainly on the Throne of Zeus at Olympia only the most conservative religious beliefs would be expressed, beliefs which were supported by a long line of tradition. Aphrodite Ourania was also worshipped at Elis and was represented with her foot resting on a tortoise, in a statue by Phidias.[3] This may be another indication of her mastery over the sea, as may likewise be the coins of Aegina with their sea-tortoises.[4] Earlier than this, evidence for her worship as a sea-deity is wanting, but one is forced to believe that it did not originate spontaneously at a period when Greek religion was fully formed. Its origins must be looked for elsewhere, and it seems more than likely that earlier traces of this worship are to be seen in Crete.

If the assumption is correct, then, that the shell in the hand of the votary indicates a deity of the sea, it is possible that we have Aphrodite represented on the Idaean gem in three aspects. The star signifies her mastery over the heavens, the trees her power over the produce of the earth, and the shell suggests that she rules the waves from which she rose.

Kate McK. Elderkin

Princeton

[1] Paus. II, 34.
[2] Paus. V, 11.
[3] Paus. VI, 25.
[4] Milbank, The Coinage of Aegina, *Num. Notes and Mon.*, No. 24, p. 12.

Archaeological
Institute
of America

CLEON'S AMPHIPOLITAN CAMPAIGN AND THE ASSESSMENT LIST OF 421

In Cleon's meteoric career nothing is more remarkable than his second rise to power. His own mistakes, through the ruin and disgrace they had brought upon Athens, had apparently made it impossible for him to regain the pinnacle of personal authority to which the affair of Pylos had brought him in 425. Yet in 422 he possessed, almost unimpaired, the trust and confidence of the Athenian people. The explanation, both of his fall from grace and of his rise again to power, is to be sought in his shifting attitude toward the empire.

His fall was due partly to criminal disregard for the modest Delian Empire established and maintained by Pericles in the days before the Peloponnesian War, partly to the broad sweep of his own imperialism, an imperialism which aimed to make Athens mistress of all Hellenes and which encouraged the more visionary of his followers to dream even of the conquest of Carthage.[1] The issue on which he regained his prestige was likewise imperialism, but this time an imperialism of a more chastened and a more Periclean stripe.

Cleon's attitude toward the old empire during the first brief period of his ascendency, his utter disregard for Periclean precepts and practice, and the far-reaching character of his own plans are clearly seen in the reassessment of tribute in 425/4 and in the campaigns of 424. Similarly, the assessment list of 421,[2] together with Thucydides' account of the Amphipolitan campaign and the events leading up to it, throw a flood of light upon his adoption of the Periclean platform of imperial defense in a successful eleventh-hour attempt to reëstablish his shattered prestige. Besides illustrating Cleon's political methods, the assessment list of 421 enables us to appraise more accurately Thucydides' treatment of the man he so cordially disliked.

To understand aright Cleon's conversion to a belief in the importance of the Delian Empire as an end in itself, we must begin with a study of the imperialism of 425–424 which was directly responsible for his temporary eclipse. The assessment of 425/4[3] shows that he regarded the Delian Empire mainly as an important source

[1] Aristophanes, *Knights*, 174, 1303; *cf.* 797.

[2] *I.G.* I, 37, frgs. yz″ and *I.G.* I, Suppl., pp. 140–141. Cavaignac, *L'Histoire Financière d'Athènes au Ve Siècle*, p. XLV and pl. 1, n. 3; Wilhelm, Urkunden des Attischen Reiches, *Anzeiger der k. k. Akad. der Wiss. in Wien*, 1909, pp. 48–49 and 52–53. We shall show in this paper that these fragments belong to a list drawn up in 421. Cavaignac is obviously wrong in assigning *I.G.* I, 543 to this list, for the stones overlap. *Cf.* Wilhelm, *loc. cit.* Possibly Bannier, *B. Ph. W.* 1916, pp. 1067–1070 is right in including with our stone frgs. t, u, v, w, x, of *I.G.* I, 37.

[3] *I.G.* I, 37, to be published by Hiller von Gaertringen as *I.G.* I ^{2}, 63.

of revenue to Athens, valuable for the attainment of further ends, for by this assessment the tribute of the subject cities was more than doubled, apparently in order that money might be forthcoming to force into the empire cities on the outskirts of the Hellenic world that had never before been enrolled as Athenian tributaries.[1] The assessment list of 425/4 was at the same time his program and a means of its realization.

But his plans for the establishment of a land empire in central Greece form the best criterion of his policy toward the existing maritime empire. Instead of trying to check the activities of Brasidas in the Macedonian peninsula, as all students of Periclean strategy would have considered necessary, he was bending every energy to the conquest of Boeotia.

No one should question Cleon's responsibility for the disasters which followed attempts to realize these grandiose schemes, for in the strategic elections, which offer the best means of testing a demagogue's control over the affairs of state, his candidates in the spring of 424 were almost invariably chosen. Hippocrates, a nephew of Pericles, who on various occasions had identified himself with the party of chauvinistic imperialists led by Cleon, became head of the strategic board, and, what was more significant, Cleon himself was elected general.[2]

During the course of the summer, the Athenian people saw one after another of his imperialistic ventures fail. While he was safely seated at his desk in the strategion, the Athenian generals returned from Sicily with empty hands, Hippocrates was overwhelmingly defeated in Boeotia, with the loss of many lives, his own included, and Lamachus was unsuccessful in his attempt to carry out the Euxine program outlined in the assessment of the year before. Cleon had given the Athenian people not one thing he had promised. But worse than Cleon's failure to carry out promises of enlarged empire was his failure to retain even what Athens had possessed when he was elected general. Neglect of the defenses in the north had allowed Brasidas to win such a foothold in and about the Macedonian peninsula that it seemed almost impossible to reëstablish Athenian power and prestige on the coast of Thrace.[3]

It is difficult to say whether popular indignation was aroused

[1] Such cities are those of the Euxine, and Melos in the Aegean. *Cf.* Beloch, *Griechische Geschichte,* II [2], 1, 330, note 3; II [2], 2, 361. In frg. p of this list we find also the name of the Pierians of Pergamus, a people living in the rich mining region of Mt. Pangaeum. It is quite probable, too, that the name Trailus should be restored in frg. z of this same list. *Cf.* Meritt, A Restoration in *I.G.* I, 37, *A.J.A.* XXIX, pp. 26–27.

[2] For a recent study of Athenian politics during 424/3, see West, *A.J.P.* XLV, pp. 141 ff; also *Clas. Phil.* XIX, pp. 217 ff.

[3] The death of the Odrysian king Sitalces also endangered the Athenian empire, for the new king Seuthes was an enemy of Athens and an ally of the fickle Perdiccas. *Cf.* Thuc. IV, 101, 5 and II, 101.

more by the defeat at Delion or by the danger to the Athenian Empire; but it is certain that Brasidas' threat to the security of the old established order brought Athens, and Cleon with it, to a realization of the importance of the Delian League.

Chauvinistic imperialism and its author were now thoroughly discredited. A series of bye elections in 424/3 and the regular elections of 423 filled the strategic board with Cleon's opponents and showed that the people had lost their faith in the man of Pylos. But the clever politician did not long despair. The developments in the north offered him a new field for his imperialism, one more in accord with the tradition of Athens during the later years of Pericles; and we see him posing henceforth as an ardent advocate of imperial defense against Brasidas. There must be no surrender of Athenian interest on the coast of Thrace. The tardiness of Thucydides at Amphipolis undoubtedly opened the way for Cleon's new policy, since by condemning Thucydides he could shift his own responsibility for Athenian misfortunes to the shoulders of his opponents, and again appear before the people as the champion of Greater Athens.

A second step in his return to popularity resulted from the revolt of Scione to Brasidas during the truce of 423. Cleon immediately proposed an expedition for the restoration and defense of the empire. Scione was to be recovered and punished with extreme severity for its rebellion,[1] and since this proposal met the needs of the situation in a manner acceptable even to Periclean democrats,[2] the ex-demagogue did not find it difficult to regain the trust and confidence of the people. In the election of 422 he was again chosen general, and the fact that the one campaign of the year was his own expedition for the recovery of lost territory in Thrace is convincing testimony to the platform on which he had been elected.

At the time when Cleon set forth from Athens the situation was favorable for the success of his venture. Perdiccas, angered by the conduct of Brasidas, had made first a truce and then an alliance with Athens.[3] This reconciliation in turn made possible negotiations and a treaty with a number of Bottic cities in the year 422.[4] Cleon, therefore, could direct his attention exclusively to the districts east of Pallene.

Remembering Cleon's boast before the campaign against Pylos, we may imagine his promise now to return to Athens with Amphipolis retaken and with the lost tributaries in parts Thraceward once

[1] Thuc. IV, 122, 6.
[2] Thucydides seems to have approved of it. *Cf.* Thuc. IV, 122.
[3] Thuc. IV, 132; *I.G.* I, 42–43 and Suppl., pp. 141 ff. *Cf.* Busolt, *Griechische Geschichte,* III, 2, 1170, note 1.
[4] *I.G.* I, Suppl., pp. 142 ff.; Ditt. *Syll.*[3] I, 89. For the date *cf.* Meritt, *Peace between Athens and Bottice, A.J.A.* XXIX, pp. 29–31.

again restored to their allegiance. The demagogue had a reputation to regain, and every name restored to the Athenian assessment lists and every additional city enrolled would be a permanent tribute to his ability and a proof of his devotion to the interests of the Athenian people. As a politician his task was to make two tributaries where there had been only one before, and this could be done by fostering the latent particularism of villages heretofore dependent on their more powerful neighbors. We need not be surprised, therefore, to find that the list of 421 is full of unknown names of insignificant villages never before assessed by Athens, at least directly. To understand the full significance of this list, we must read it as a campaign document, a bald summary of promises fulfilled, reflecting, even though in an exaggerated way, the importance of Cleon's achievements.

Looking at the assessment in this light we need not criticize Thucydides for failing to mention the recovery or subjugation of places named in this list. Cleon's petty successes in 422 were, in the mind of the historian, as little significant as Cleon's grand but futile promises in 425/4. On the other hand, a study of the assessment list will make it clear that consciously or unconsciously Thucydides omitted details of successes and inserted references to failures in order to minimize the results obtained by his enemy, just as he apparently magnified Cleon's responsibility for the expedition's ultimate failure by neglecting to mention even that the latter had colleagues in command.[1]

For information about this campaign supplementary to Thucydides' narrative, we are therefore dependent on an assessment list that has never been fully understood nor even correctly dated. From internal evidence we shall show that it was a direct consequence of Cleon's last expedition.

By the editors of the Corpus the fragments which we call collectively the assessment list of 421 were assigned to the *τάξις φόρου* of 425/4. Cavaignac realized that they must belong to another year, but he was undecided between 421/0 and 417/6. Wilhelm noted that the character of the writing was very much like that of documents from the year 421/0.[2] A third attempt to date this inscription placed it before the spring of 421/0, because Mecyberna, one of the towns assessed in the list, was lost to Athens in the late winter of that year.[3]

The choice of these dates was dictated by the theory, once commonly held, that reassessments were made every four years, first at the Great Panathenaea, but from 437 on at the lesser festival in the

[1] Beloch, *Griechische Geschichte*, II [2], 1, 339 note.
[2] For references, see note 2, p. 59, *supra*.
[3] West, *History of the Chalcidic League*, p. 85, note 9.

second year of the Panathenaic penteteris. But when it was shown that reassessments were made as the occasion demanded, and that we must modify the theory of quadrennial assessments, as originally formulated,[1] it became impossible to use the four-year interval for dating the *τάξις φόρου* in question either in 417/6 or in 421/0. We have only Wilhelm's opinion that the writing is quite similar to that of documents from 421/0, in addition to whatever information we may be able to glean from the stone itself.

Fortunately, there is one connecting link between this assessment and the quota list of 421/0. On one of the fragments of the quota list appears the name ΣομβιΛ[-- together with the amount of its tithe to the goddess of --]Γ⊢IIII.[2] In the assessment list there is the item XXXX Σομ[--.[3] Since the tithe to the goddess was a mina from every talent, the quota paid to the goddess from a tribute of 4,000 drachmae would be 𐅄ΔΓ⊢IIII. The last figures of this sum are credited to ΣομβιΛ[-- in the quota list. Consequently we are justified in restoring there the full amount [𐅄Δ]Γ⊢IIII[4] and in completing the reading Σομ in the *τάξις φόρου* to agree with the name on the quota list: Σομ[βιΛ---. The final letter is probably an alpha.[5]

This comparison of the two inscriptions shows at least that there is no internal evidence against dating the assessment list prior to the spring of 421/0 and that the possibilities are strongly in favor of this earlier date. It seems safe to say that this assessment list is the one on the basis of which the quota list of 421/0 was drawn.

Turning now to a study of the names recorded in the assessment list, we find that it was probably necessitated by the events of 422.

In the first place, the alliance with Perdiccas had returned as Athenian tributaries the cities on the Macedonian coast once subject to Athens. This change is reflected in the assessment list by the appearance of the name Sinus,[6] a town whose last known payment of tribute had been made in 433/2.[7] That its appearance on the

[1] Wing, Tribute Assessments in the Athenian Empire, *Report of the Amer. Hist. Assn.*, 1916, Vol. I, pp. 293 ff., has gone farther than the evidence warrants.

[2] *I.G.* I, 272b, assigned by Wilhelm, *op. cit.* pp. 50–51 to the same year as *I.G.* I, 260 (421/0). Wilhelm corrects the reading of the Corpus: Σομβρια[νοί].

[3] *I.G.* I, 37, frg. z″. Wilhelm, *op. cit.* p. 49 gives the letters as ΣOM and not as ΣOY as found in the Corpus.

[4] The initial [Δ] of the Corpus was, of course, a restoration *ex coniectura.* Since the left margin is lost we may restore quite as easily an initial [𐅄Δ] before the figures Γ⊢IIII found on the stone.

[5] [Σόμβ]ια should probably be restored in *I.G.* I, 37, frg. z, line 9, which gives us the final letter of the name in *I.G.* I, 272b. There is no other Hellespontine name of six letters ending in ια except possibly Ζελειᾶται which is found elsewhere in *I.G.* I, 37, frg. z′. *I.G.* I, Supp. 272e, . . ⟍BIA, should also be restored Σό]μβια. From 272e we should restore in 272b the name following Sombia as Σερ[ιοτειχῖται].

[6] Sinus has been identified with the Sindus of Herodotus, VII, 123, and the Sinthus of Stephanus. It was located at the head of the Thermaic gulf. *Cf.* Ditt. *Syll.* [3] I, 332, note 4. For the treaty with Perdiccas see Busolt, *Griechische Geschichte,* III, 2, 1170, note 1. Serme, too, was possibly located somewhere on the Macedonian border.

[7] *I.G.* I, 244.

assessment list indicates more than an idle hope is shown by the fact that it actually paid its quota in 421/0.[1] Those cities of Bottice, likewise, which had concluded an alliance with Athens at about this time, are represented on the assessment list. They too were actual and not merely potential tributaries of Athens in 421/0, for Tripoae and Camacae, both party to the Bottic alliance,[2] are on the quota list of that year. The name Τριπ]οαί represents this group of cities in the assessment list.[3] Undoubtedly Camacae and the other towns which ratified the alliance were on another part of the stone, now lost. Their return as allies to Athens is one of the reasons why the assessment of 421 was a necessity.

But another very important reason for a reassessment at this time was the campaign of Cleon in the autumn of 422. In view of the fragmentary nature of the list as it is preserved, his conquests are reflected in the inscription with remarkable clarity.

The expedition first touched at Scione, and then sailed to Sithonia where Torone was retaken. This was in itself an important success for Athens, but its immediate results were much more significant than Thucydides gives us reason to suspect. It was followed by the evacuation on the part of Brasidas and his discouraged Chalcidic allies of the entire Sithonian peninsula. Of this Thucydides gives only a hint when he tells us that Brasidas, when coming close to Torone and learning that it had been taken, stopped and returned. But the assessment list is more explicit, for on it are found the names of Singus, Mecyberna, and Gale.[4] There can be no question that these three towns, or what was left of them after the synoecism of Olynthus in 432, were in the hands of the enemy, at least after Brasidas got control of Torone and southern Sithonia. That there was very little left of them is shown by the absurdly low tribute of ten drachmae demanded of each of them.[5]

A brief notice in Thucydides with regard to Mecyberna confirms our view about the completeness of the evacuation of Sithonia.[6] It was in the hands of Athens in the winter of 421/0, and as it is unlikely that the Chalcidians surrendered it willingly after the peace of Nicias by which they refused absolutely to be bound, we can infer only that it fell into the hands of Athens at a time when Athenian power had revived in Sithonia through Cleon's successes there.

[1] *I.G.* I, 37, frg. y; *I.G.* I, 260.
[2] Ditt. *Syll.* [3] I, 89; *I.G.* I, 260.
[3] *I.G.* I, 37, frg. y.
[4] Singus was on the eastern coast of Sithonia; Mecyberna was at the head of the Toronaic gulf on the site of the modern Molyvopyrgus; and Gale was on the western coast of Sithonia a short distance north of Torone. For an identification of the sites and a brief account of the fortunes of these three towns during the first ten years of the war see Meritt, A Restoration in *I.G.* I, 37, *A.J.A.* XXIX, pp. 26–28. In frg. y,—ιορος should probably be restored Γ|Lορος. Piloros was near the base of Sithonia. This part of the stone, *in rasura*, is not στοιχηδόν.
[5] *I.G.* I, Suppl., pp. 140–141.
[6] Thuc. V, 39.

After the death of Cleon Athens was on the defensive, and the few details that we know of events Thraceward refer to Chalcidian conquests of Athenian allied cities.[1] Furthermore, it now seems likely that the much debated clause in the Peace of Nicias about Mecyberna, Singus, and Sane[2] should be interpreted as giving Athens authority to prevent the reincorporation of these towns into the body politic of their stronger neighbors, Olynthus and Acanthus. Thus the treaty itself may be used to supplement the narrative of Thucydides and to corroborate our interpretation of the assessment.

Possibly the most convincing evidence, at least so far as concerns Singus, Mecyberna, and Gale, that the assessment list of 421 is not a padded document like large parts of the τάξις φόρου of 425/4 lies in the ten drachmae assessment of these three towns, an amount so low that it would be humorous if charged against expected tributaries *in partibus infidelium.* The fact that these three cities had been assessed the same low amounts in 425/4 shows that they were in Athenian hands before the arrival of Brasidas in the Macedonian peninsula.[3] Furthermore, on one of the annual lists of those slain fighting for Athens is recorded the name of a man who died in Singus.[4] While the date of this is uncertain—it comes from one of two years, either just before Brasidas reached Chalcidice, or while he was active there—it shows that Athens held Singus at about the time when the assessment list of 425/4 was drawn up. Possibly the soldier lost his life defending the city against Brasidas. In any case Cleon, in recovering the town in 422, was merely fulfilling his preëlection promises to restore the shattered empire.

From Torone, so Thucydides briefly informs us, Cleon sailed to Eion on the lower Strymon.[5] But Cleon's plans did not allow him to pass by revolted towns without at least an attempt to recapture them. All of the towns of Athos, except Dion and Sane, had gone over to Brasidas.[6] But Brasidas, after the fall of Torone, had withdrawn to the defense of Amphipolis. Since no aid could be expected from their Spartan ally, the cities of Athos became loyal subjects of Athens again, probably of their own volition after learning of Torone's fate.

Of Cleon's success on Athos, as in the case of Sithonia, Thucydides says nothing, but students for many years have known of this

[1] For Mecyberna, *cf.* Thuc. V, 39; for Thyssus, *cf.* Thuc. V, 35 and p. 66 *infra* and note.

[2] Thuc. V, 18, 5.

[3] Meritt, A Restoration in *I.G.* I, 37, *A.J.A.* XXIX, pp. 26–28.

[4] Ditt. *Syll.*[3] I, 77. There was fighting also in Sermylia, a town not far to the east of Mecyberna near the base of the Sithonian peninsula. This, too, was probably in Athenian hands when Brasidas began his operations in the Chalcidic region. It could hardly have remained Athenian while Brasidas was active, and yet it was in Athenian possession at the time of the Peace of Nicias. *Cf.* Thuc. V, 18, 8.

[5] Thuc. V, 3, 6.

[6] Thuc. IV, 109.

particular lapse on the part of the author.[1] Consequently the assessment list of 421, which contains the names of Cleonae and Acroathos, tells us little that was not already known about affairs on Acte.[2] These two names, together with that of Thyssus (not on the extant fragments of our list, but known to have been loyal to Athens in 421),[3] Sane and Dion (which did not go over to Brasidas) account for all but one of the Actean cities mentioned by Thucydides.[4] The assessment list confirms the conclusions of earlier scholars, and reciprocally their account of Cleon's work on Athos corroborates our thesis that the reassessment of 421 was necessitated in large part by the very important earlier victories of Cleon. The silence of Thucydides has caused Cleon to be greatly underrated as a restorer of empire.

Either on his way to Eion, or after establishing headquarters there, Cleon attempted to continue his work on the shores of the

[1] Kirchhoff, *Thukydides und sein Urkundenmaterial*, pp. 42 ff.; Meyer, *Geschichte des Altertums*, IV, pp. 410–411; West, *History of the Chalcidic League*, p. 65, note 10. Kirchhoff noted the fact that if the towns of Athos were in Spartan hands at the time of the Peace of Nicias it is strange that they were not listed by name with the Spartan clientele. Furthermore, Thyssus was loyal to Athens befoie its capture in the summer of 421 (Thuc. V, 35, 1), and there is no provision concerning it in the treaty, except in the general reference of Thuc. V, 18, 8: Σκιωναίων δὲ καὶ Τορωναίων καὶ Σερμυλιῶν καὶ εἴ τινα ἄλλην πόλιν ἔχουσιν Ἀθηναῖοι, Ἀθηναίους βουλεύεσθαι περὶ αὐτῶν καὶ τῶν ἄλλων πόλεων ὅτι ἂν δοκῇ αὐτοῖς. This passage is entirely sufficient to provide for the towns of Athos if they were in Athenian hands at the time the treaty was made. If they were not then Athenian possessions, a lacuna must be assumed in the text of Thuc. V, 18, 5, to provide for their mention. The only alternative is the impossible assumption that the Athenians, during the negotiation of the treaty, were content to allow this group of towns to remain hostile to them.

[2] *I.G.* I, 37, frg. y; *I.G.* I, Suppl., pp. 140–141.

[3] Thuc. V, 35, 1. Unfortunately the manuscript of the text concerning Thyssus is corrupt. The codices have: τοῦ δ' αὐτοῦ θέρους καὶ Θυσσὸν τὴν ἐν τῇ Ἄθῳ Δικτηδιῆς (this is the reading of B E F M; A reads Δεικτηιδιῆς; C reads Δικτιδιεῖς; G reads Δικτυδιεῖς) εἶλον Ἀθηναίων οὖσαν ξύμμαχον. Steup, *Thukydideische Studien*, p. 34, follows the suggestion of Meineke and reads ἐν τῇ Ἀθωίδι Ἀκτῇ Διῆς as being nearer the Mss. tradition than the conjecture of Didot adopted in the Oxford text: ἐν τῇ Ἄθω Ἀκτῇ Διῆς. Poppo reads Χαλκιδῆς. If Didot's reading, or the suggestion of Meineke, is to be retained, then one Athenian ally is represented as fighting against another. Such a state of affairs was, of course, not impossible, but from *a priori* reasons one would not expect Thucydides to notice an intercity feud which affected in no way the relation of the parties concerned to the protagonists in the war. Or, if he did record the capture of one ally by another, one might reasonably expect him, brief though his reference be, to note the fact that *both* towns were Athenian allies. Steup, *op. cit.*, p. 34, has suggested that in this case the probable wording of the passage would have been: καὶ αὐτὴν Ἀθηναίων οὖσαν ξύμμαχον instead of merely Ἀθηναίων οὖσαν ξύμμαχον. He considers Ἀθηναίων οὖσαν ξύμμαχον as an interpolation and adheres to Meineke's reading in the earlier part of the passage. But his argument amounts to throwing out an apparently sound and understandable part of the text on the evidence of a passage known in itself to be corrupt. There is no reason for discrediting the genuineness of the phrase: Ἀθηναίων οὖσαν ξύμμαχον, and whoever the Δικτηδιῆς of the manuscripts were, they were apparently hostile to Athens as well as to Thyssus. Poppo's conjecture Χαλκιδῆς follows this interpretation and has the merit of a certain amount of inherent historical probability. The capture of Thyssus took place in the summer of 421. It is known that the Chalcidians did not accept the peace concluded in the spring of that year, and we have elsewhere evidence of their military activity in the year following the ratification of the treaty. Their capture of Mecyberna, for example, is related in Thuc. V, 39.

[4] Olophyxus is the only one of the cities mentioned by Thuc. IV, 109, of which we have no information.

Strymonic gulf.[1] In this he was probably more successful than Thucydides leads us to suppose, for the only event that the historian saw fit to record was Cleon's failure to take Stageira. Now Stageira is a place famous in history, but vicariously so as the birthplace of Aristotle. In 422 Aristotle was not born and this "polis" was an insignificant hamlet, whose total population of men, women, children, metics, and slaves, could not have numbered much more than 500 souls. It was, in fact, about as small a town as Athens thought fit to tax regularly in the Thracian district.[2] Cleon's forces probably outnumbered the whole population of Stageira three to one. Shall we consider Cleon's failure here as a test of his ability and of his service to the empire, or shall we rather consider it an exception, noteworthy on that account? Stageira had one other factitious claim to notoriety. It was still in open rebellion at the time of the Peace of Nicias, and it was for that reason mentioned by name in the treaty along with its more powerful neighbors. When we compare the list of six unsubdued cities mentioned in the treaty either with the long list of tributary states mentioned in the quota lists before the war or with the very fragmentary assessment list of 421, we see how successful Cleon was in delimiting the area of the revolt.

Although he failed at Stageira, largely because of the mountainous character of the country in which it is located,[3] he must have been more successful on the route which led from the Madeconian peninsula to Amphipolis, for the assessment list records Bormiscus, a town of strategic importance situated where Lake Bolbe enters the sea.[4] By occupying these places Cleon cut off, partially at least, the Chalcidic rebels from their brothers in Argilus and Amphipolis. Here too, Cleon was occupying territory previously held by the Athenians.[5]

But far more important for the income of the empire was the Pangaean region into which Athens had made many attempts to penetrate. Thucydides tells us that Cleon stormed Galepsus, a town situated on the coast. This was a very petty victory, for Galepsus was another Stageira. But Thucydides passes over in silence the acquisition of Trailus, a city inland not far from the site of the later Philippi, whose assessment was six times that of its

[1] Thuc. V, 6.

[2] The regular tribute of Stageira was a thousand drachmae. No regularly enrolled city of the Thracian region paid less, although smaller sums are found in the appendices of some of the later lists. More frequently we find cities of the other districts paying less than 1,000 drachmae.

[3] Leake, *Travels in Northern Greece*, Vol. III, pp. 164 ff. *Cf.* also Kinch, *Erindringer fra Makedonien*. Tilskueren, 1891, p. 461.

[4] Thuc. IV, 103, 1. Possibly Posideion, if this town was located between Bormiskos and Argilos. *Cf.* Herodotus, VII, 115; Busolt, *Griechische Geschichte*, III, 2, 1009; Ditt. *Syll.*[3] I, 75, line 28.

[5] See Meritt, A Restoration in *I.G.* I, 37, *A.J.A.* XXIX, pp. 26–28.

maritime neighbor. In this case, however, we cannot tell whether Cleon was restoring to the empire a city once tributary or extending the empire to include a city to which claims had been made in the assessment of 425/4.[1]

As further evidence for Cleon's activity in the interior, there are two short notices in Thucydides, one that the whole Edonian levy was on the side of Brasidas, a natural consequence of Cleon's determination to bring into the empire the mining region in which the Edonians lived, and the other that the Odomantes, inland neighbors of the Edonians, were on the side of the Athenians.[2]

No writer has troubled to give us any information as to events farther east on the Thracian coast, but the assessment list shows that while Cleon was active to the west of Abdera the empire toward the east was being reorganized and strengthened. Zone and Sale, unheard of since the expedition of Xerxes had passed through them, and Drys, a near neighbor, are found as autonomous tributaries for the first time in the assessment list of 421.[3] In the time of Xerxes, Samothrace had control of the mainland in this region, and Athens apparently allowed the island to continue in possession. But the Odrysian Empire, when it began to expand, was not so lenient, and the tribute of Samothrace sank from six talents first to four and then to two, probably because of the loss of its mainland possessions.[4] The same phenomenon occurred at other points in the Odrysian sphere of influence.[5] After the outbreak of the Peloponnesian War Athens was in no position to protest against these encroachments of the Odrysians, for she needed the support of the Odrysian king Sitalces, who, in turn, was well disposed toward Athens. After his death in 424, however, conditions were altered, for Seuthes, the successor of Sitalces, was an enemy of the Athenians. Consequently, it is not surprising that Athens should now attempt to get control of the coast from Abdera to Aenus. Between 424 and 421 there was no time so favorable to Athenian prestige as the first few weeks of Cleon's campaign, and we may credit him also with the restoration of the empire to the east of Abdera.[6]

If Cleon had lived to return, he could have pointed with pride,

[1] The name Trailus is probably to be restored in *I.G.* I, 37, frg. z. *Cf.* Meritt, A Restoration in *I.G.* 1, 37, *A.J.A.* XXIX, pp. 26–28.

[2] Thuc. V, 6.

[3] *I.G.* I, Suppl., pp. 140–141; Herodotus, VII, 59; Stephanus of Byzantium, *s.v.*, Δρῦς. Perdrizet, *Rev. Et. Grec.* 1909, XXII, pp. 33 ff., in his discussion of the assessment of these cities, omits several factors of prime importance to a full understanding of the problem, the low Samothracian tribute of *I.G.* I, 240, 259, and probably 256, the growth of the Odrysian Empire, and its relations with Athens. Finally he dates in 425–4 the fragment on which are found the names of the Samothracian dependencies. The whole question merits further study.

[4] *I.G.* I, 237; *I.G.* I, 240; *I.G.* I, 259.

[5] The tribute of Aenus was reduced from ten talents to four between 440 and 436.

[6] The coöperation between Cleon and the Odomantes indicates an attempt to form an anti-Odrysian combination. *Cf.* Thuc. II, 101, where the Odomantes are afraid of the Odrysian power.

after the manner of more modern politicians, to his achievements since the people had chosen him to defend and restore the empire. The coast of Thrace from Aenus to Pallene had been reorganized, much of it reconquered, and Cleon was in a position, rightly or wrongly, to claim credit also for the cities added to the empire by means of the Bottic alliance. But Cleon died before Amphipolis in the early winter of 422. Political control passed to Nicias and the advocates of peace. The actual assessment of the new allies now fell to the lot of Cleon's opponents and it was probably completed during the year 421, when the cities concerned had had an opportunity of laying their case before the Athenian people.

The ratification of the Peace of Nicias and the attendant reorganization of the Athenian empire no doubt made advisable the general assessment of which the fragments we have had under discussion form a part. But the alliance with Perdiccas, the peace with Bottice, and the campaign of Cleon had already necessitated a readjustment of the Thracian tribute. It is only a coincidence that the Thracian reassessment came to form a part of the general reassessment of the whole empire. Cleon's victories made necessary the one, his death made possible the other.

There is one other slight bit of evidence for the date we have adopted. The Peace of Nicias itself indicates that Athens in the spring of 421 was considering the problem of what tribute to impose on her still rebellious subjects. Her decision, embodied in the treaty, to be content with the Aristidean tribute from the six rebellious cities,[1] required in equity, if not in logic, a reassessment in the Thracian region inspired with a spirit of gratitude toward subjects that had remained loyal or had returned of their own accord. Either Athens had already decided on this course when the treaty was drawn up, or she was to be brought face to face with the problem as soon as the treaty was known. It seems probable, however, that the question of a general assessment was under advisement when the treaty was made.

In conclusion, Cleon's attempt to regain popularity and prestige first led him to adopt a platform with regard to the empire quite at variance with his earlier schemes, one almost Periclean in its scope, and secondly, when action was required, it placed him in command of an expedition which according to Thucydides' narrative was an almost complete failure, but which in fact did more to restore Athenian prestige in Thrace than has been even suspected hitherto. Cleon's services to Athens are found recorded in two mutually corroborative documents, the Treaty of Nicias and the Assessment List of 421.

WHEATON COLLEGE — ALLEN B. WEST
BROWN UNIVERSITY — BENJAMIN D. MERITT

[1] Thuc. V, 18, 5.

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AN ATHLETE'S HEAD IN THE FOGG MUSEUM OF ART

Plate II

The Fogg Museum of Harvard University has recently acquired, through the generosity of a private donor, a fine Parian marble head,[1] which now forms—together with the famous statue of Meleager—the chief attraction of the gallery of sculpture. It is in an excellent, though not perfect, state of preservation; the marble, which does not appear to have been overcleansed, retains much of its original whiteness and polish. The tip of the nose has suffered damage, and there are slight chippings to be discerned on the neck, the helix of both ears, the right upper eyelid, and the right temple. The head has been broken from off its statue or terminal bust about two inches below the line of the chin (Plate II).

The delicate and careful moulding of the features of the face, the treatment of the hair, the absence of hard and mechanical workmanship, as well as of any manifestation of the operation of the running drill, preclude the possibility of the head's being a Roman copy. The technique is wholly that of a marble worker—an artist of no mean attainments. Furthermore, the likeness is not that of a youthful Hermes, or Apollo, or other Greek deity. We see merely the fresh and ingenuous countenance of a young Hellene, of ephebic age—18 to 20—and the portrait, if such it may be called, is so markedly idealized that individual characterization is almost entirely lacking. That the head belongs to an athlete is evident from the presence of thick and swollen ears, though the possession of this, to us, unsightly feature by no means necessarily indicates—as Gardiner, Hyde, and others have amply proved[2]—that the owner was a professional pugilist. On the other hand, from the great relative thickness of the neck, one may perhaps plausibly conjecture that the youth was a wrestler, inasmuch as the sport of wrestling, more than any other, tends to develop this part of the frame.

The face of the youth expresses a slight degree of lassitude. It is turned a very little towards the left. The eye is somewhat vacant, and seems to be regarding nothing in particular; but we must not, of course, overlook the possibility in the way of animation that

[1] *Fogg Art Museum Notes*, Vol. 1, 1921, pp. 6–8; George H. Chase, *Greek and Roman Sculpture in American Collections*, 1924, p. 97, fig. 113. I wish to express my heartiest thanks to Director Edward W. Forbes and to Professors Paul J. Sachs and George H. Chase, of the Fogg Museum, for their very kind permission to publish this head.

[2] E. Norman Gardiner, *Greek Athletic Sports and Festivals*, 1910, pp. 425–6; Walter Woodburn Hyde, *Olympic Victor Monuments and Greek Athletic Art*, 1921, pp. 167–171.

Head of an Athlete
Fogg Museum, Cambridge

Plate II

might be imparted to the features by the artist by the judicious use of pigment.

The skull and the bony framework of the face are unusually massive. The cephalic index of the head is approximately 77[1]—which would mark the type as mesaticephalic. The head form, however, is of the sort which is generally associated with the brachycephalic type, showing a flattened crown, and having the summit of the skull in a straight vertical line with the top of the ear. Although the skull

FIGURE 1. HEAD OF AN ATHLETE. FOGG MUSEUM

is decidedly well domed, it is not altogether of the so-called aristocratic type, which is portrayed so beautifully in the works of the school of Praxiteles.

The hair has met with a somewhat impressionistic treatment at the hands of the sculptor. To one viewing the head from the front, it appears to lie very solidly on the scalp in a form not unlike a wig. In general, it is arranged in very thick, solid clumps, which merge one into the other, each being very slightly grooved or ridged. A few small isolated locks lie scattered on the forehead and temples, as well as on the nape of the neck. Towards the crown of the head, longer and thinner strands of hair appear. The general effect of the whole is more pleasing from a side, rather than from a front, view. A curious feature of the back of the head is the deep circular groove which is

[1] The variation in the depth of the hair at different points, indeed the very fact of the presence of hair, of course renders accurate craniometry impossible.

cut into the heavy locks and extends almost from ear to ear. For this peculiarity, which is shared, to a greater or less degree, by a fair number of ancient statues,[1] it seems impossible satisfactorily to account (Fig. 1).

A relatively small portion of the brow is exposed. It possesses a well-defined frontal ridge with a very slight depression just above the nose. The eyebrows are sharply cut, as in fifth-century style, and the flesh beneath swells somewhat towards the outer corners of the eye-cavities. The upper eyelid is heavy and overlaps the lower at the outer extremity. The under eyelid has a very slight rim and is beautifully modelled—doubtless the most delicately executed feature of the face. The inner corners lie relatively deep, and the lachrymal canals are clearly indicated. The eyes themselves are decidedly long in proportion to their height, the relation being almost three to one, as in Praxitelean models; but the eye as a whole protrudes in a fashion that does not suggest fourth-century work. The distance between the inner corners of the eyes is slightly more than an eye length.[2]

The nose is shorter and stouter than the average and is depressed a very little at the root. It shows a slight flattening along the ridge, while the sides of the organ merge into the cheeks in a perfectly naturalistic fashion. A noteworthy feature is the very slight indication of the opening of the nostrils. The upper lip is short and heavily creased; both lips are full and sensuous, though moulded with much delicacy. The boring drill has been used at the extremities of the mouth. Chin, and cheeks are alike round, full, and smoothly modelled, but the sculptor has spent little time over the anatomical details of the juncture of the neck with the skin that covers the ramus of the jaw.

It is to be observed that the general harmony of the execution of the head as a whole is broken by the following small irregularities: the right ear is 3 mm. longer than the left; the eye-sockets are not on quite the same plane, and the right is cut in nearer to the medial line of the face than is the left; the right eye is 2 mm. longer than the left

[1] Notably, the Hermes of Praxiteles. It is difficult to dissociate the feature from some form of fillet-binding; but no solution of the problem yet put forward seems to apply to all cases.

[2] The following are the chief dimensions of the head, expressed in centimetres:

Circumference of head	66.9
Total height of marble	31.3
Height of head proper	25
Temple to temple	14
Chin to forehead hair	16.7
Length of mouth	5
Between eyes	3.5
Length of right ear	7
" " left "	6.7
" " right eye	3.1
" " left "	2.9

and 1 mm. less in height. There is also manifest a slightly different treatment of the upper lids at their inner angles. The ears, although correctly placed, are unusually small and very sketchily worked. The lobe adheres solidly to the head; the helix is very slightly indicated; and the whole is "cauliflowered" to such an extent that details are obscure.

The head of our athlete is obviously the work of a sculptor who possessed skill, good taste, and ability of a high order, but was not, withal, an artist of the first rank. It would be fruitless to conjecture who he was, but his date, or at least that of his production to which our attention is directed, may be determined with a fair degree of accuracy. It is manifest that the style of the fifth century is mirrored in the treatment of the face regarded as a unit, where little or no modelling is seen except in the eyes, nose, and mouth. It appears likewise in such matters of detail as the hard line of the eyebrows and the general fashioning of the eye-cavities. The treatment of the hair, while it recalls that seen on several of the figures portrayed on the frieze of the temple of Apollo at Bassae, [1] finds rather closer parallels on works of the early fourth century, and seems even to anticipate the impressionistic style employed so skilfully by Praxiteles. Furthermore, in some of the finer details of the eye, we see certain features which might perhaps suggest a blend of Praxitelean and Scopasian traits; but on a closer examination, we find that we have in the execution before us merely what might be termed an anticipatory hint of those principles of style afterwards developed to such an eminent degree by the great artists of the fourth century. In view of these considerations, as well as on the basis of many comparisons [2] which I have made of the head of the ephebe with approximately-dated sculptures, it would appear to me that one would not be far astray in placing its date at about B.C. 400.

The style of the Fogg Museum head shows but little affiliation with the school of Pheidias. To some of the heads of the statues produced by Polycleitus and his followers it bears at least a superficial resemblance—particularly to those that bear Attic characteristics. This is true especially in relation to the massiveness of the skull, and the heavy and almost weary expression of the face. But, on the other hand, we miss such elements as the broad Argive cheekbones, the platycephalic head, and the thin, though projecting, lips.[3]

[1] For the closest parallels, compare the section of the frieze shown in Brunn-Bruckmann, *Denkmäler*, pl. 89.

[2] *Cf.*, *e.g.*, the head of the Discobolus in the Antiquarium at Rome, Brunn-Bruckmann, *Denkmäler*, pls. 683–5; a head of Pan in the Villa Borghese, *ibid.* pl. 363; a statue in the Ny-Carlsberg Glyptotek at Copenhagen, *ibid.* pl. 597; *cf.* also Conze, *Attische Grabreliefs*, pls. XVII, LIX, LXXVIII, CII; Collignon, *Les Stat. Fun.*, 1911, fig. 69.

[3] The Fogg head may be compared with several others which are generally regarded as possessing a mingling of Polycleitan and Cresilean traits, such as the

The distinctive features of the head before us may be said to be: the finely-worked eye, with its heavy upper lid and clear indication of the lachrymal canals; the short, rather stout nose, with faintly marked nostrils; the fresh, pouting lips. The *tout ensemble* certainly suggests the art of Myron, more particularly the head of Perseus in the Antiquarium at Rome,[1] which is now almost universally regarded as a copy of the famous masterpiece of that artist. Despite, however, the very striking points of resemblance between the two heads, there are certain outstanding differences. The skull of the Perseus presents lines quite other than those of the Fogg head. The eyes of the former are much coarser—even if we make due allowance for their inferiority of treatment at the hands of the Roman copyist; the nose, though equally short, is narrow except across the alae of the nostrils; the face of the Perseus is longer and more tapering, and the treatment of the hair is altogether dissimilar. Nevertheless, it may well be that the head of the athlete represents but a later development of the tendencies which originated in the school that produced the hero.

The school founded by Myron was continued and enriched through the genius of his pupil Cresilas, of whom all too little is known, though his preëminence is attested by the fact that he is mentioned no fewer than three times by Pliny.[2] Fortunately, the identification and study of the several copies of his Pericles have afforded a reasonably firm pedestal, upon which has been grouped a goodly number of works which in all probability belong to this artist or his school. However, it is often very difficult to draw a hard and fast line of separation between works Myronian and Cresilean. The veteran scholar, Ernest Gardner, in an article published as recently as 1923,[3] wherein he seeks to take from Cresilas the authorship of the Medusa Rondanini and to restore it to Myron, is unable to find any specific arguments to support his contention. Even Furtwängler, after writing a lengthy analysis of the respective styles of Myron and Cresilas, is obliged to acknowledge: "Cresilas merely developed what Myron had begun."[4]

To the later and fully developed school of Myron, which we seem justified in calling the Cresilean, must the head of the athlete in the Fogg Museum be assigned. Its mannerisms are reflected, in a

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Nelson head, now in Boston, Brunn-Bruckmann, *Denkmäler*, pl. 544; the head of Pan in the Villa Borghese, *ibid.*, pl. 363; the head of a statue in the Ny-Carlsberg Glyptotek, *ibid.*, pl. 597: the skull-form and certain other features also recall a head found at the Argive Heraeum; Waldstein, *Argive Heraeum*, pl. XXXI, 1 and 2.

[1] Brunn-Bruckmann, *Denkmäler*, pls. 603, 604: the inferior copy in the British Museum has largely lost its Myronic character through the liberties taken by the copyist.

[2] Pliny, *N. H.*, *XXXIV*, 53; 74; 76.

[3] E. A. Gardner, *J. H. S.*, XLIII, 1923, p. 140.

[4] A. Furtwängler, *Masterpieces of Greek Sculpture*, 1895, p. 170.

greater or lesser degree, in such works as: the busts of Pericles,[1] particularly the copy in the British Museum; the Diomede in Munich[2] and the replica of the head which is now in the Boston Museum of Fine Arts;[3] the so-called Alcibiades of the Vatican;[4] and the Petworth head[5] and its four replicas—all of which seem now to be generally regarded as copies of Cresilean originals. There is to be seen the slight turn of the head to the left that we have noted; the short, dimpled upper lip; the fullness of mouth; the absence of modelling where jaw and neck join; the small ear, placed somewhat obliquely; the locks of hair lying on the cheek.[6] Some of these points of similarity are most conspicuous even in the case of the head of Pericles, though here the comparison is between the features of a youth of from eighteen to twenty and a man of mature years. The similarity in respect to details is of course to be best observed by placing our head side by side with the magnificent replica of the Petworth head which is now in New York, although the athlete who served as the model for the latter was of an older and somewhat more refined and intellectual type than the youth represented in our head.

The various works which have been attributed to Cresilas show no great degree of uniformity as regards treatment of hair. The semi-impressionistic arrangement of locks which we noted in the Fogg head finds, among these, its closest parallel in the case of the Alcibiades of the Vatican, where the treatment, generally speaking, is the same; the Diomede, too, is not dissimilar in this respect.

We seem justified in the conclusion that the head in the Fogg Museum, while not a work of Cresilas himself, is almost certainly a product of some distinguished disciple of the great master, who flourished at the close of the fifth century—possibly, it seems worth while suggesting, a member of the school in the Argolid which he presumably established in his later years.[7] Our head, therefore, forms a somewhat important milestone in the course of artistic development which leads from Myron to Cresilas, and from Cresilas to Praxiteles and his successors.

A. D. Fraser

Westminster College

[1] For copy in Brit. Museum, see *B. M. Sculp.* I, no. 159; Vatican copy, Brunn-Bruckmann, *Denkmäler*, pl. 156.

[2] Brunn-Bruckmann, Denkmäler, pl. 128.

[3] *Ibid.*, pl. 543.

[4] *Ibid.*, pl. 129.

[5] *Leconfield Collection*, pl. 24; the best of the replicas is in the Metropolitan Museum, N. Y. See *Cat. Class. Coll.*, pp. 214–17, and p. 215, fig. 130; Hyde, *Olympic Victor Monuments*, pl. 15.

[6] The shallow cutting of the nostrils which we have noted in the Fogg head appears to be a characteristic of Cresilean works, in so far as I have been able to determine; but the point can hardly be pressed.

[7] This seems to be amply proved by the discovery of an inscribed basis bearing his name (Löwy, *Inschriften griechischer Bildhauer*, 1885, no. 45) at Hermione. Furtwängler plausibly conjectures that Cresilas, being a foreigner, was compelled to leave Athens at the beginning of the Peloponnesian War (*Masterpieces*, p. 117).

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AN INSCRIBED HYDRIA IN AEGINA

In the museum in the modern town of Aegina, locked up in a case in the "Sphinx Room," there is a bronze hydria-kalpis (Fig. 1) which has on its lip an important dedicatory inscription.[1]

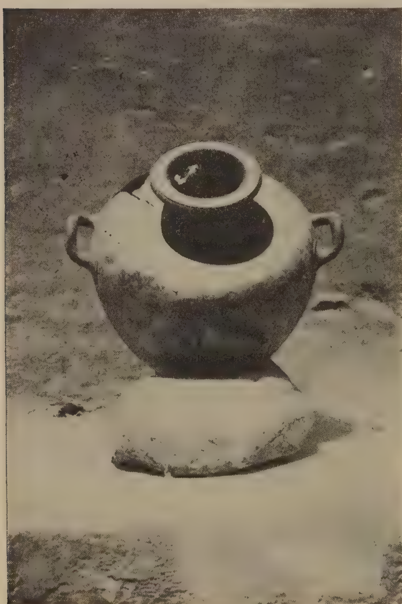

Figure 1

The bronze hydria is well preserved with the exception of two small irregular holes with jagged edges, which have resulted from the corrosion of the bronze; one is on the shoulder and the other, the smaller hole, is on the neck of the vessel. The following are the dimensions of this hydria: height, 35.4 cm.; diameter of base, 13.3 cm.; diameter at shoulder, 29.3 cm. (including handles, 35 cm.); diameter of the rim, 13.4 cm.; width of lip, 1.5 cm.; height of letters, .8 cm. The hydria has two handles, and these are asymmetrically placed, one handle being two or three centimeters off the horizontal axis of the vessel.

The inscription on the upper surface of the lip reads:

.Πλάθων 'Εκεσθένης ἀνέθεν, *h*υιοὶ Προκλέους, *h*Ελλανίῳ Διί.

"Plathon (and) Ekesthenes, sons of Prokles, dedicated (me) to Zeus Hellanios."

The letters in the reproduction of my squeeze are so clear that an exact transcription seems unnecessary (Fig. 2). Suffice to give here the fourteen letters which appear in the inscription:

A, Δ, E (ϵ, η), H(*h*), Θ, I, K, Λ, N, O (*o*, *ου*, ω), Γ, P, ≶, V.

The words are divided by punctuation-marks of three dots, except that between the last two words only two dots are used. Apparently the engraver had inscribed the initial delta of the following

[1] I wish to thank Professor Ludwig Curtius of the University of Heidelberg for permission to examine the hydria and to publish the inscription, and also for information concerning the place of its discovery.

word before he bethought himself of the punctuation. On epigraphical grounds, I should date this inscription in the period between 480 and 460 B.C. (The dedication was doubtless made before the Athenian conquest of the island in 457 B.C.)

This dedicatory inscription is important because it helps to identify the site and remains of the temple of Zeus Hellanios.[1] At the foot of the north slope of the Oros, the conical peak in the southern part of the island of Aegina, are the remains of an ancient temple.

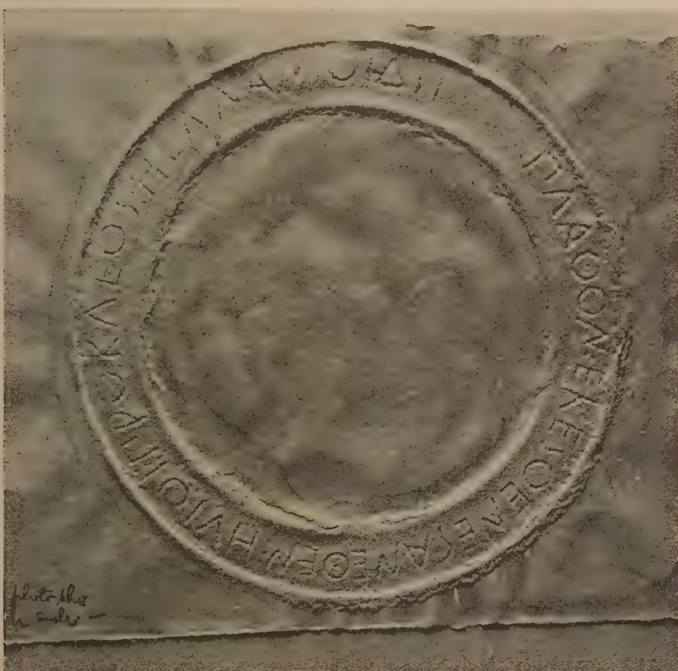

FIGURE 2

The church of *Hagios Asomatos* is built in part of ancient blocks and stands upon these foundations. In 1905 Furtwängler and his associates excavated this hieron, which he identified as that of Zeus Hellanios.[2] (In the time of Pausanias, it was known as the hieron of Zeus Panhellenios.)[3]

The inscribed hydria was not found at this site, but was discovered in 1906 by Professor Ludwig Curtius in a "*merkwürdigen Wasserbasin*" several minutes' walk from this hieron. I believe that a *pegadi* which I have visited on the east slope of the Oros is

[1] For the cult and hieron of Zeus Hellanios in Aegina, *v.* the author's *Prehistoric Aigina*, chap. IV, sec. 5 (to appear this Spring).
[2] Furtwängler, *Aegina; das Heiligtum der Aphaia*, pp. 5 and 473–4 (brief mention). A report of this excavation will appear in a future volume.
[3] Paus., II, 30, 3–4.

the place where this hydria was found. Doubtless it had been carried hither from the hieron of Zeus Hellanios to whom it had been dedicated. It was found in some débris made up for the most part of "Megarian" pottery. Perhaps it had been concealed there. At any rate, because of its provenance, the inscription on this bronze hydria confirms the identification of the hieron on the north slope of the Oros as the hieron of Zeus Hellanios,—an identification which had been made on the basis of traditions and a stamped roof-tile.

J. Penrose Harland

University of Cincinnati

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THE JANUS SHRINE OF THE FORUM

Authorities ancient and modern stand in general agreement, that the famous little shrine of Janus, whose doors were open in time of war and closed when Rome was at peace, lay in the Roman Forum at the point where it was entered by the street known as the Argiletum, and close to the boundary of the Comitium.[1] There is even more substantial agreement regarding its form.[2] It was not a true *aedes*, but a double gateway, Janus Geminus or *geminae portae*, connected by side-walls which were surmounted by a grating and entablature, but without a roof, the whole structure being rectangular or cubical. The following words of Martial indicate that even in the Empire and in spite of the statue which then stood in the centre of the edifice it was an open passageway through which throngs of pedestrians could pass:

> "Pervius exiguos habitabas ante penates
> Plurima qua medium Roma terebat iter."[3]

As the double Janus was of remote antiquity, the street which it spanned could in the beginning have hardly been other than the Sacra Via, or its extension, that is the part passing through the Forum, the Comitium, and up the Capitoline Hill to its northern summit, the Arx. Richter[4] and Platner[5] consider the branch of the Clivus Capitolinus which led to the Arx to have been earlier and at first more important than the famous branch leading to the Capitolium and temple of Jupiter Optimus Maximus, which Platner[6] states was made into a carriage-road at the end of the regal period. There is good evidence that their conclusion is correct and that the Arx was originally more important than the Capitolium, for the Optimus Maximus temple dates only from the close of the monarchy, and it was on the Arx not only that the augurs were accustomed to interpret the will of Jupiter[7] and sacrifice with secret rites,[8] but, if

[1] Livy I, 19; Ovid, *Fasti* I, 258 (cf. Jordan, *Topographie der Stadt Rom* I², p. 348); Seneca, *Apocolocyntosis*, 9; Dio LXXIII, 13; Procopius, *Bell. Goth.* V, 25; Jordan, *op. cit.* I², pp. 345–51; Huelsen-Carter, *The Roman Forum*, ed. 1909, pp. 5 and 12; Platner, *Topography*, p. 191; Iwan von Müller, *Hdbk. der Klass. Alt. Wissensch.*, volume on *Topographie der Stadt Rom* by O. Richter, München, 1901, p. 102.

[2] Vergil, *Aen.* I, 295; VII, 607; Ovid, *Fasti* I, 257; Plut., *Numa*, 20; Martial X, 28, 3 ff.; Cohen, *Méd. Imp. Romaines*,² I, p. 289, No. 141 ff.; Jordan, *op. cit.* I², 351–352; Roscher, *Lex. Myth.* II, pp. 16–17. Iwan von Müller, *Hdbk. der Klass. Alt. Wissensch.* volume on *Religion und Kultus der Römer* by Georg Wissowa, München 1912, pp. 104–105; Binder, *Die Plebs*, p. 68; Richter, *op. cit.* in Iwan von Müller's *Hdbk.*

[3] X, 28, 3–4.

[4] *Op. cit.* p. 49.

[5] *Op. cit.* pp. 294–295.

[6] Platner, *op. cit.* p. 294.

[7] Livy I, 18, 6–10; Varro, *Ling. Lat.* V, 47.

[8] Paulus Diaconus, ed. Müller, p. 16 (under *Arcani*).

the conclusion reached in my doctoral thesis be correct, it was here that sacrifice to Jupiter was offered from remote antiquity on the Ides,[1] and, as Varro and Festus tell us, the victim of this sacrifice was led in solemn procession along the Sacra Via to the Arx.[2] Moreover, the southwestern section of the area of the Forum was originally a swamp from which the ground sloped upward on the north, east, and west,[3] another reason which renders it improbable that, in the early days before the valley was drained by the Cloaca Maxima, the extension of the Sacra Via could have made the bend to the south with which we are familiar from its present course. Topographers actually have accepted changes in the course of this street and of the Argiletum during historical times.[4]

Now, as shown in my paper, *The City of the Early Kings*, read before the meeting of the Classical Association of the Atlantic States last May,[5] I hold with Binder and earlier topographers, that the city of the four regions was an outgrowth of the union of two distinct communities, the Septimontium and the Quirinal settlement (of which the Capitoline Hill formed a part), lying on either side of the Forum valley and communicating with each other by the Sacra Via, which, as Binder,[6] Gilbert,[7] and Schneider[8] have pointed out, was not a city-street, *vicus*, but the earliest of Roman roads outside the city, such as the later Via Appia.

Binder then argues,[9] from Niebuhr's original theory, that the walls of the two settlements became extended into the valley, and, when the union took place, were joined by a double gate, Janus Geminus, spanning the Sacra Via, of a type still to be seen at Volaterrae. The form of the Janus Geminus shrine of historical times, Binder believes to have closely preserved that of this prehistoric gateway, of which he considers it the symbolical memorial.

It seems, however, very unlikely that two cities would have erected walls almost contiguous, prior to uniting their governments, when tradition represented them as originally hostile; still more unlikely that they would have built walls after uniting. Therefore, while accepting Binder's view regarding the significance of the Sacra Via and the origin of the four region city in the two communities between which it ran, I cannot accept his conclusion respecting the Janus Geminus of the Forum.

The real solution for the double nature of this gateway is to be

[1] *The Sacra Idulia in Ovid's Fasti*, University of Pennsylvania, 1917, pp. 9–31.
[2] Varro, *Ling. Lat.* V, 47; Festus, ed. Müller, p. 290.
[3] Van Deman, *J.R.S.* XII, p. 3 ff., Binder, *Die Plebs*, p. 53 ff.
[4] Cf. Van Deman, *op. cit.*, p. 16; *A.J.A.* XXVII, p. 393; Ashby, *Cl. R.*, XV, p. 138.
[5] To be printed in *The Cl. Weekly*.
[6] *Die Plebs*, p. 62.
[7] *Geschichte und Topographie der Stadt Rom*, I, p. 215.
[8] *Röm. Mitt.* X, p. 162, n. 1.
[9] *Die Plebs*, pp. 67–68; Niebubr, *Röm. Geschichte*, I, p. 239.

sought in another direction, though finding its remote origin in the duality of the community after the union of the two peoples. Legend records that Numa moved his *regia* or royal dwelling from the Quirinal to the spot afterward occupied by the historical Regia, Atrium Vestae and Aedes Vestae on the Sacra Via where it entered the Forum,[1] all three of which were originally one building according to Miss Van Deman[2] and are recognized as having been the house of the king.[3] This position of the royal residence between the newly united communities, may be compared with the founding of Washington midway between the northern and southern states of our own union.

Now I am convinced that the early Romans, even after the development of the city of the four regions, dwelt in farm villas which were walled, and that Dr. Norman De Witt[4] is correct in holding that the Forum was the courtyard of the king's villa. The southwestern section, it is true, must have been largely marsh, perhaps not unacceptable to the fowls and pigs of the barnyard, until drained by the Etruscan dynasty; but through the higher ground of this court, on the northeast, must have run the Sacra Via, uniting the two groups of the king's subjects through the courtyard of their monarch and enabling the king to pass directly from his dwelling and the royal hearthside into the Comitium, where the senate and assembly met and public business was transacted. At the point where the Sacra Via must have entered the Comitium stood the Janus Geminus in historical times. I agree with Professor De Witt in seeing in this Janus the original gateway to the king's court. But why was it double or *geminus?* Because, if the Sacra Via ran through the court, or Forum, it was necessary to have a *ianus*, or gate, not only at the point where the road passed out of the Forum and into the Comitium, but also where it entered the Forum in front of the Regia.

Hence the *ianus* of the king's court, alone of all *iani*, was *geminus* or double. After the abolition of the monarchy, when the Forum became merely the market-place of the city and ceased to have walls, and when the Vesta of the king was perpetuated on its site by the Regia as a symbolical hearth of Rome, the Janus Geminus was also perpetuated in the symbolical little edifice which existed throughout Roman history. The form of this famous shrine must, therefore, have been nothing more or less than a symbolical preservation of the double-gated courtyard of the king.

Horace W. Wright

Lehigh University

[1] Solinus I, 21; Ovid, *Fasti* VI, 263–4, Plut., *Numa*, 14.
[2] *The Atrium Vestae*, Washington, D. C., the Carnegie Institution, 1909, p. 9.
[3] Solinus, *loc. cit.;* Plut., *loc. cit.;* Ovid, *loc. cit.;* Festus, p. 279, ed. Müller; Wissowa, *op. cit.* p. 502; Jordan, *op. cit.* I, pp. 423–429; Wright, *op. cit.* pp. 18–19.
[4] The Origin of the Roman Forum, *Cl. J.* XIV, p. 433 ff.

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NOTE ON A SARCOPHAGUS AT CORINTH

SINCE the publication of this sarcophagus,[1] two fragments, forming the head of the first warrior at the left, have been found by Mr. F. P. Johnson.[2] The larger piece (Fig. 1), which was discovered first, contains the eye, forehead, and hair of the figure and portions of the background. The smaller one forms the top of the head (Fig. 2), which is encircled by a wreath of bay or laurel leaves. These fragments show that the figure's gaze was directed toward his comrades at the right, and not outward, as I had thought possible.[3]

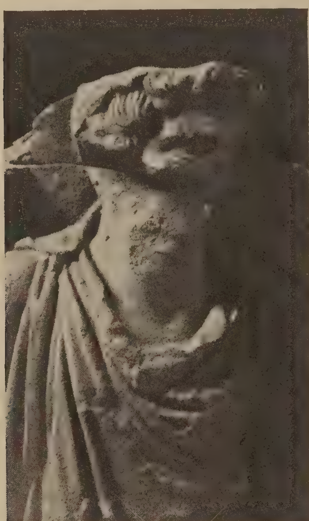

FIGURE 1

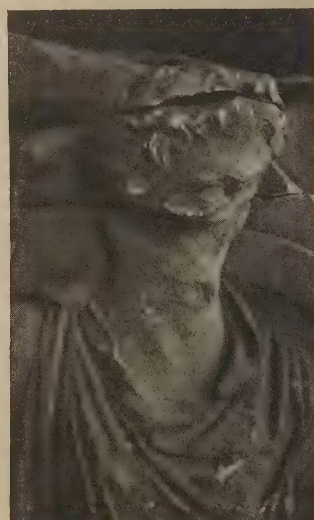

FIGURE 2

This correction, however, does not affect the conjectural identification of this warrior with the seer, Amphiaraus.[4] On the contrary, the head tends to confirm the interpretation, because of the wreath worn by the figure (clearly visible in Fig. 1).

Amphiaraus was more famous as a soothsayer, or *μάντις*, than as a warrior. Although we have no evidence that the Greek seer wore a special costume, we do know that he belonged to the priestly class and that priests generally wore garlands on their heads. That

[1] A Sarcophagus at Corinth, *A.J.A.* XXVI, pp. 430 ff.

[2] I wish to acknowledge the kindness of Mr. Johnson in notifying me of his discoveries and supplying me with photographs of the fragments.

[3] A Sarcophagus at Corinth, *A.J.A.* XXVI, p. 435. (I wish to take this opportunity of correcting an error in note 1 on this page—for *left wrist* read *right wrist.*)

[4] A Sarcophagus at Corinth, *A.J.A.* XXVI, p. 438.

the first warrior wears a short cloak and not the long robes of a priest is sufficiently explained by the fact that he is here portrayed as a soldier. At the same time the sculptor may have given him the wreath in order to distinguish him from the other warriors, an hypothesis which can be proven only if the other heads are found.

I feel, therefore, that the discovery of these fragments has strengthened the identification of the first warrior with the seer, Amphiaraus.

J. Donald Young

Columbia University
New York

GENERAL MEETING OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

DECEMBER 29–31, 1924

THE Archaeological Institute of America held its twenty-sixth meeting for the reading and discussion of papers at the University of Chicago December 29, 30 and 31, 1924, in conjunction with the American Philological Association, and the College Art Association. There were three sessions for the reading of papers, and one joint session with the College Art Association. The abstracts of the papers which follow were furnished by the authors.

MONDAY, DECEMBER 29. 2.30 P.M.

1. A HEAD OF AN EPHEBE IN THE FOGG MUSEUM OF ART

A. D. Fraser, Westminster College

This paper is published in this number of the JOURNAL.

2. REPUBLICAN OSTIA

Helen Pence, Vassar College

3. THE JANUS SHRINE OF THE FORUM

Horace W. Wright, Lehigh University

This paper is published in this number of the JOURNAL.

4. APHRODITE WORSHIP ON A MINOAN GEM

Kate McK. Elderkin, Princeton, N. J.

This paper is published in this number of the JOURNAL.

5. A LOST CARTOON FOR THE ST. ANNE MADONNA OF LEONARDO DA VINCI

John Shapley, New York University

It has generally been held that Leonardo da Vinci worked out two distinct compositions for the St. Anne Madonna, one represented by the Royal Academy cartoon, the other by the Louvre picture. The description of the cartoon exhibited by Leonardo in Florence in 1501 has been assimilated to the Louvre composition. On closer examination it develops that the literary sources are against this. Both the description of Nuvolaria and the poem of Casio point to a composition unlike that of the Louvre picture but like that preserved in a drawing of the Venice Academy. There were thus three distinct versions of the St. Anne Madonna, not two as has heretofore been believed.

TUESDAY, DECEMBER 30. 9.30 A.M.

1. STYLE OF ILLUMINATION OF MT. ST. MICHEL IN THE TWELFTH CENTURY GLASS OF LE MANS

A. M. Friend, Jr., Princeton University

When the glass-makers of the middle ages were called upon to represent the human figure and episodic scenes in their windows they found they had no tradition for such portrayal. Their art was fundamentally decorative, not representational. Therefore they had recourse to the pictures and drawings in illuminated Mss. At times the resemblances are so close that the school of Ms. illumination used can be made out. This is particularly the case in some of the 12th century glass in Le Mans Cathedral which shows startling similarities to the illustration in Mss. belonging to the school of Mt. St. Michel. Clement Heaton in the *Brooklyn Museum Quarterly*, July, 1916, has already called attention to the connection between the figures of the Apostles in the famous Ascension window of Le Mans and those in the Cartulary of Mt. St. Michel, now Ms. 210 in the library at Avranches. The purpose of this paper is to demonstrate more completely the relation between the glass artists of Le Mans and the miniaturists of the Mount. One characteristic of the pictures in the Mss. from Mt. St. Michel is the excessively wide spread of the knees of the seated figures. This same exaggeration shows up in a panel of the window next to that of the Ascension. The panel represents four seated apostles one of whom, behind St. Paul, has his knees so wide spread that they appear on either side of the saint. The Gallican Missal from Yates Thompson's collection, now in the Morgan Library, which was illuminated on Mt. St. Michel c. 1100 shows the same ridiculous knees in the miniature of the Pentecost. The picture of the Ascension in the same Ms. shows the same woolly hair on St. Paul that he possesses in the glass panel mentioned above. More convincing still is the absolute similarity between the heads of St. Ambrose and his followers in the topmost panel of the end window in the north aisle and those of the ecclesiastics on f. 23 v. of the Cartulary of the Mount. Even the smallest details of drawing the eyes, nose and beard are reproduced. The closest analogies with the glass are the miniatures in the Cartulary which dates from the time of Robert de Torigny, that is after 1154. In 1134 a fire destroyed a large part of the cathedral. Between these years was the period of prosperity for Le Mans when it was the capital of the Angevin realm and the chief city of Geoffry Plantagenet and his wife Mathilda. In the struggle with Stephan of England the monks of the Mount espoused the cause of Mathilda. More important still for their connection with Le Mans is the fact that one of their chief possessions was the Priory of St. Victeur in that city. The relations between the mother abbey and the Priory were always naturally close culminating in the complete rebuilding of St. Victeur by the abbot of Mt. St. Michel after the fire of 1170. Thus the connections between the Mount and Le Mans are political and ecclesiastical as well as artistic.

2. RECENT DISCOVERIES AT SOLUTRÉ, FRANCE

Mrs. George Grant MacCurdy, New Haven, Conn.

During the summer of 1924 the American School of Prehistoric Research in Europe carried on excavations at the classic station of Solutré near Macon (Saône-et-Loire) at the invitation of Professor Depéret and Drs. Mayet and Arcelin of Lyons. Solutré has three relic-bearing horizons of Upper Paleolithic age: Aurignacian, Solutrean, and Magdalenian. The site, which comprises some 2.5 acres, was discovered in 1867 and has been excavated intermittently since that time. A number of human skeletons have been found there—perhaps the most important

being the three of Aurignacian age discovered by Depéret, Mayet, and Arcelin during the summer of 1923.

The spot set aside for the American School was the highest portion of the area covered by the station. It adjoined a trench sunk by the Abbé Breuil and Dr. Arcelin eighteen years ago, where they found cultural remains including an example of cave art but no human skeletal remains. The School was especially fortunate in finding a human skeleton the first day, and before the end of a week had encountered five others. It is too early to establish definitely the age of the various skeletons. Solutré is admirably adapted by nature for a prehistoric camp site and place of burial; it is high and dry with a spring nearby and protected on the north by the towering rock of Solutré. The Aurignacians were the first to leave their dead here; later races did likewise. The problem is to decide which are the intrusive burials.

The skeletons uncovered by the School were all near the surface, the deepest being not much over two feet; but depth alone is no criterion of age. The spot where the skeletons were found has been subject to erosion for thousands of years. On the contrary, the adjoining depression in which the three skeletons were found in 1923 has been subject to fill for a like period of time; this fact would easily account for the additional depth of four feet at which they were found.

The first skeleton (that of a female) found by the School was a burial similar in every detail to the Aurignacian burials discovered last year. It lay full-length, resting on the back, with a flagstone set up at each side of the head. Some red ocher was found near the right hand. Bones of the horse and reindeer were picked up in fairly close association with the skeleton. At the same level, but somewhat removed from the skeleton, Paleolithic flints were found. There was nothing to suggest an intrusive burial; however, only after detailed studies have been made can one say definitely whether or not this is a Cro-Magnon skeleton.

The other five skeletons are apparently of later date; in fact three of them certainly are. None of them had flagstones at the head. The second skeleton found is that of an old man. Bones of the horse, reindeer, etc., were found in fairly close contact with it, also a flint chip but no finished implements. The skeleton is practically intact and is particularly interesting on account of the pathological condition at the upper (proximal) end of the left fibula. Accident or disease had carried away the upper end, and the shaft of the fibula had fused with that of the tibia some four centimeters below what would have been the normal epiphysial contact.

Find number three was a fragmentary cranium only; a Solutrean laurel-leaf flint point was found with it. Skeleton number four is an adult female and with it were the bones of a young child. A bronze earring was picked up near this skeleton by one of the workmen; the skeleton probably dates from the Bronze Age. Skeleton number five is that of a very old man of small size; with it was found a fragment of sheet bronze. The last skeleton found is that of a child some six years old. In uncovering this skeleton a bronze buckle was found near the head of the left femur. Judging from the style and workmanship of this buckle, the burial probably dates from about 300 to 400 A.D.

3. THE UNIVERSITY OF CINCINNATI EXCAVATIONS AT NEMEA

J. Penrose Harland, University of Cincinnati

This was only a preliminary report. The full report by Carl W. Blegen of the American School at Athens will appear in the March number of *Art and Archaeology*.

4. THE LYDIAN BILINGUAL INSCRIPTION

George W. Elderkin, Princeton University

The Transliterated Text

1. . . . islū bakillū est mrud eśśk vānaś
2. laprisak pelak kudkit ist esū vānaū
3. būtarvod akad manelid kumlilid silukalid akit nāpis
4. esū mruu buk esū vānaū buk eśćać
5. lapirisać bukit kud ist esu vānaū būtarvod
6. aktin nāpis pelūk fēnsūifid fakmū artimuś
7. ibśimsis artimuk kulumsis aaraū biraūk
8. kūidaū kofuūk piraū pelūk bilū vqbapēnt

The Revised Translation

. . . in the month of Bacchus. This stele and this cave and the stone coffins and everything—whatever is dedicated in this cave—is the property of Mane, the son of Kumli, the son of Siluka. If any one destroys this stele or this tomb or these stone coffins or if (he destroys) what is dedicated in this cave—if any one destroys anything at all then may Artemis of Ephesus and Artemis of Coloë deprive (him) of court and house, land and spring and everything (that is) his.

Commentary

Although scholars have been quick to point out certain resemblances of Lydian to Latin and Greek they have naturally hesitated to draw the conclusion that Lydian is an Indo-European tongue. These resemblances, however, acquire added significance from the close relation of Lydian and Greek cult. It is remarkable that the sepulchral curse-inscriptions of Sardis invoke not an Artemis of Sardis but Artemis of Ephesus to punish desecrators. The Lydian version of the bilingual calls first upon the Artemis of Ephesus, as if the more important, and then upon the Artemis of Coloë. To no other deity is appeal made in this inscription. The Lydian monarch Croesus had recorded his devotion to the same Artemis of the Ephesians by dedicating a column of her temple and inscribing his name upon it. With the name of Artemis there is found in another inscription a name recognized as that of Apollo. Again it will be recalled that Croesus showed very great reverence for the Apollo of Delphi whom he said he honored more than any other deity. This was not a newly developed interest in the god because Gyges had sent gifts to the oracular shrine which confirmed him in possession of the Lydian kingdom. The Lydian worship of the Ephesian Artemis and her brother was clearly long established when the inscriptions were carved and this fact suggests, although it does not prove, that the Lydians were the kin of the Greeks and not merely neighbors.

Other Lydian gods are mentioned in the Lydian inscriptions. *Lametrus* may be the Greek Demeter. If the two names are identical then the Lydian *l* could represent the Greek δ just as *l* does in the pair *lacrima* and δάκρυ. The worship of Dionysus under the name Bacchus is evident from the Lydian *kavek Bakillis,* "priest of Bacchus." Still more significant is the name "Bacchus" for the Lydian month corresponding to October-November. These names but deepen the impression of a close religious tie between the Lydians and the Greeks and justify an examination of Lydian vocabulary with special reference to Greek and Latin.

Line 2. Littmann questions his own translation of *laprisak* "funerary couches." The word is probably a compound. A fuller form *lapirisa* occurs in line 5 and seems to be composed of *lapi* and *risa*. The first component *lapi* suggests the Latin word *lapis* "stone" while the second component is perhaps akin to Greek ῥίσκος "chest, sarcophagus." *Lapirisa* would then designate those stone coffins

which were actually found in the tombs at Sardis. Professor Butler (Sardis. I, *The Excavations*, p. 116) records the discovery of three stone sarcophagi in one tomb at Sardis. The order of the objects mentioned in the inscription is the order in which they were approached. First is the stele which stood at one end of the lowest step before the tomb. Next is the tomb. The third item comprises the sarcophagi which were the most important contents of the tomb, and the fourth item comprises the dedications within the tomb. Some idea as to these dedications is perhaps to be gathered from another of the Lydian curse-inscriptions which invokes a penalty upon any one who destroys *fakatać ebad . . . ra bistać tapalać* which may represent Latin *secatas aut . . . pictas tabulas* "carved or . . . painted tablets." The Etruscans placed painted terra-cotta tablets in tombs.

Line 3. The resemblance of *kudkit ist* to *quidquid est* has been regarded as mere coincidence. It is rather highly significant: *kudkit* is a relative pronoun in the neuter singular referring to *pelak* which the Aramaic shows must mean "and everything"; *pelak* is a reduction from * *peladk* just as *mruk* is a reduction from * *mrudk*. Both have the enclitic *k* "and" which is at once compared with the Latin *que*. The Lydian verb in the clause is *ist* which is the Latin *est*. The next words *esũ vãnaũ* mean "in this tomb." The last word of the relative clause is *bũtarvod* in agreement with *kudkit* and its antecedent *pelak* (* *peladk*). *Bũtarvod* is a participial adjective and probably the same word as Latin *votīvum* for * *votirvom*. Other examples of such reduction are given elsewhere by the writer (*Kantharos* p. 165). The Lydian neuter of the adjective seems to have had the ending *d* like the Latin neuters *aliud, illud* and *istud*. The Lydian *bũtarvod* is very near to * *votirvod*. The correspondence of the initial *b* with *v* recalls the Cretan pronunciation of β as digamma.

Littmann transliterates the word *bũtarvod* with *ũ* in the first syllable. Buckler in his very careful edition of the Lydian inscriptions substitutes the Greek λ for the *ũ* because in the Lydian version of the name Alexander, the *l* is represented by the sign ϒ which is the second letter also of *bũtarvod*. This change of *l* to *u* in Lydian was also a feature of the Cretan dialect. Hesychius gives several examples. The Attic word ἄλσος appears in Cretan as αὖσος; ἄλμα appears as αὖμα. Thus Lydian and Cretan could both represent a Greek λ as *u* and both apparently could pronounce a *b* as digamma. It may be that a close linguistic connection existed at an early period between Lydian and Cretan.

Line 3. Silukalid. For a Greek inscription from Salihiyeh dated A.D. 175 and giving the names of son, father and a grandfather Seleucus, see *Syria*, IV (1923), p. 221.

Line 4. buk, "or." If Lydian *b* represents the Latin *v*, then *buk* represents a form * *vuk* and is possibly composed of *ve* and the enclitic *k*. Lydian also has the negatives *nik . . nik* which Littmann translated "neither . . nor." They look very much like the Latin *nec . . nec*. The enclitic *k* may have passed from the Lydian negative pair *nik . . nik* to the positive *buk . . buk*.

Line 5. kud ist takes the place of *kudkit ist*. *Kud* is here apparently the Latin *quod*.

Line 6. fēnsũibid may be the same verb as Latin *findere* "to cleave." Torrey notes that the corresponding verb in the Aramaic version means "to break in pieces."

Line 7. biraũk is translated by an Aramaic word for "house." The *k* is enclitic. This word has been compared with the Hittite *bira*, "house" which Sayce thinks the Hittites borrowed. The same word for "house" hitherto unnoticed in this connection is the Messapian βύριον. Can this word be Semitic in origin?

The last line of the Lydian inscription contains the word *kofuũk* which with the enclitic means "and soil." *kofu* may be compared with Greek γαῖα (* γαϝια) and Gothic *gavi*.

The similarity of several words in a single inscription of eight lines to Latin and Greek words tends to confirm the conclusion drawn from the devotion of the Lydians to Artemis, Apollo and Bacchus that the connections with the West are due ultimately to community of race.

5. THE LARES AUGUSTI

Lily Ross Taylor, Vassar College

This paper will be published in a later number of the JOURNAL under the title of the "Mother of the Lares."

6. CUICUL

Franklin P. Johnson, University of Illinois

Cuicul was founded at about the end of the first century after Christ. The site, situated 125 kilometers west of Constantine, in eastern Algeria, has been excavated by French archaeologists since 1909. With the exception of Timgad, no other Roman town in north Africa is so well preserved. Most of the remains belong to the third century; they include a theater, two forums, two temples, a market, a triumphal arch, private houses, etc. Later constructions, including a Christian basilica and a baptistery, occupy an area separate from the old town, though adjoining it. A number of views were shown, illustrating the site as it was in December, 1923.

TUESDAY, DECEMBER 30. 2.30 P.M.

1. THE ROMANO-BRITISH COLLECTION IN THE ROYAL ONTARIO MUSEUM

Cornelia G. Harcum, Royal Ontario Museum of Archaeology

This paper will be published in a later number of the JOURNAL.

2. NICOSTHENES—HIS ACTIVITIES AND AFFILIATIONS

Stephen B. Luce, Brown University

This paper is published in this number of the JOURNAL.

3. PROBLEMS OF ARCHITECTURAL RECONSTRUCTIONS AT PISIDIAN ANTIOCH

Frederick J. Woodbridge, University of Michigan

4. THE STYLE OF THE UTRECHT PSALTER

W. Frederick Stohlman, Princeton University

The Utrecht Psalter has always interested students of illuminated manuscripts because of its unique style. The figures are drawn in line, by the pen, and give the impression of a hasty sketch. The stroke of the pen is short and broken suggesting the form rather than outlining it. There is no contour, for the stroke follows not the outline but is drawn in the direction of the light. This method produces a drawing in terms of shadow and where the light falls there is no line. The result is the broken, nervous style of the Utrecht Psalter. This style is a direct translation into line of the impressionistic style of Hellenistic-Roman painting. Examples of this style are many but the best for purposes of comparison is the small

frieze in the House of the Vetii in Pompeii. That this impressionistic style died out in the West by the fourth century is evidenced by the illustrations of the First Vatican Vergil. The complete decay is seen in the Second Vatican Vergil. The decay was in the direction of a hard closed contour. In the East the same change takes place. This can be traced through the Vienna Genesis and the Rossano Gospels.

This forces us to the conclusion that the scribes of the Utrecht Psalter had before them a psalter of impressionistic style done not later than the fourth century. A conclusion so important and so revolutionary demands checking by every means at our command. This has not as yet been completed and the purpose of the paper is to invite suggestion and criticism. There are two lines of investigation that will serve as checks, one is iconographic, the other textual. In iconography the problem is being attacked in the following way. Each scene in the Utrecht Psalter is studied to see if that scene occurred in the monuments of the fourth century. Up to the present we have reached no definite conclusions. With the texts this method has been followed. There are three versions of the psalter, the Alexandrian Greek text, the versions of the Latin Psalter by Jerome and the Old-Latin pre-Jerome versions. The object of the investigation is to find which one of these versions inspired the illustrations of the Utrecht Psalter. The work on the text is being carried on by Mr. Kraeling of the Lutheran Seminary at Philadelphia, the other by Mr. A. M. Friend and the writer.

5. THE KEY-STONE OF VÉZELAY

A. Kingsley Porter, Harvard University

The discussion regarding the chronology of the sculpture of Modena, Cremona and Pontida in Lombardy has been closed in favour of the early dating. The discovery of the Bari throne, dated 1098 by peremptory evidence, Professor Loomis' observation that the armour of the Porta della Pescheria is of a type not used after 1109, and the coming to light of related monuments in Spain definitely dated early in the twelfth century, make it certain that the Lombard sculptures were executed early in the twelfth century, as the documents indicate, not about the middle or end of the century, as certain archaeologists had supposed. Now the same discrepancy between the dates indicated by the documents, and those accepted by archaeology exists also in other parts of Europe. This is notably the case for Burgundy. A new proof that the early dating is correct here too has recently come to my notice. It is the sculptured key stone of Vézelay. This represents the church of Vézelay, holding in her hand a model of the unfinished basilica. About is the inscription: *Sum modo fumosa, sed ero post haec speciosa.* This can only refer to the fire which ravaged the monastery of Vézelay in 1120. The keystone is therefore a peremptorily dated monument.

This keystone demolishes the two gratuitous hypotheses that have been advanced by the apologists for the late dating, who have wished to set aside the documentary evidence that the extant Romanesque portions of the church were erected between 1104 and 1132. The first of these hypotheses is that the church was completely destroyed by the fire of 1120. The keystone states categorically that the church was damaged by smoke, but would be repaired. The second hypothesis is that the capitals of Vézelay were carved after being placed in position. Such procedure would be contrary to Romanesque practice; and the keystone definitely shows that at Vézelay it was not followed. A comparison of the style of the keystone with that of the capitals of the western portions of the nave and of the narthex makes it clear that the style, while not precisely the same, is surely contemporary. These capitals must consequently have been carved immediately after the fire, between 1120 and 1132, just as the documents indicate. On the

other hand, certain capitals of the eastern part of the nave of Vézelay show a style distinctly more archaic than that of the keystone; that is a clear indication that they were carved between 1104 and 1120, again as the documents indicate.

There are many reasons for believing that the capitals of the nave of Vézelay were strongly influenced by those of the ambulatory of Cluny, erected 1087–1095. That the two are related is obvious; and that Vézelay is derivative is proved by the fact that certain features of Cluny reproduced are misunderstood. Now it seems probable that knowledge of the Cluniac types may have been brought to Vézelay by the master of the Daniel capital. He also worked at Cluny, for his hand is found on the capital of the Sacrifice of Abraham, probably from the nave, and if so, executed 1095–1113. The hand of the same master is found in the crypt of St.-Parize-le-Châtel, which there is reason to believe was begun in 1113. The early date of the nave of Vézelay is thus still further confirmed.

Hence the date 1120 established for the keystone of Vézelay proves that the early dating indicated by the documents for the entire Burgundian school of Romanesque sculpture is correct.

Tuesday, December 30. 7.30 p.m.

1. THE LECTURE SYSTEM OF THE INSTITUTE IN RETROSPECT AND PROSPECT

Ralph Van Deman Magoffin, New York University

2. GOLDEN DEEDS OF EGYPTIAN EXCAVATORS

Jean Capart, Royal Cinquentaire Museum of Brussels, visiting professor of the C. R. B. Educational Foundation, Inc.

3. THE UNIVERSITY OF MICHIGAN EXCAVATIONS AT PISIDIAN ANTIOCH AND AT SIZMA

David Moore Robinson, Johns Hopkins University

This paper, illustrated with more than a hundred slides mostly made by Mr. George R. Swain, official photographer of the expedition, including several colored views and Mr. Woodbridge's restorations of the Propylaea, the Temple of Augustus, the triple gateway in the west wall and his plan of the city, discussed the results of the excavations and gave a revised account, somewhat more up-to-date than the report published in the last number of the American Journal of Archaeology, pp. 434–444.

The statue of Victory referred to on pp. 435 and 441 is a good Roman copy of the first century A.D. of a Greek statue of the end of the fifth century B.C. and not an original Greek work. The bases referred to on p. 438 are those on which also stood the pedestals with the *Res Gestae*, which were probably carved in ten or more columns. The two sculptured captive Pisidians, one draped and the other nude, were in the spandrels of the central arch of the Propylaea (p. 439). On p. 441 the error was made of saying that the Temple of Augustus was of marble, whereas it was of a fine-grained limestone. A detailed publication will appear in the *University of Michigan Humanistic Studies.*

WEDNESDAY, DECEMBER 31. 9.30 A.M.

(Joint meeting with the College Art Association)

1. A BUST OF LORENZO DE'MEDICI IN THE COLLECTION OF MR. CLARENCE H. MACKAY

Clarence Kennedy, Smith College

2. (a) BEADS OF AURIGNACIAN AGE FROM THE DORDOGNE DISTRICT, FRANCE

(b) ROCK CARVINGS OF THE MAGDELENIAN AGE FROM THE CAVE, LIMEUIL, DORDOGNE DISTRICT, FRANCE

George L. Collie, Beloit College

3 FLEMISH PAINTINGS IN THE LEHMAN COLLECTION

Walter W. S. Cook, New York

(Read by title.)

4. ORIGINS OF EARLY CHRISTIAN PAINTING

Clark Lamberton, Western Reserve University

The paper stressed the desirability of beginning the study of Christian painting with examples of the first century, rather than with miniatures and other examples of several centuries later. In its origin Christian painting conformed faithfully to its environment. Its element of originality consisted in contriving a cycle of themes of Christian import under the terms of contemporary expression. This was the contribution of Christianity to art. In time the development of this cycle exercised due influence on technique. Christian painting had no antecedents save those of technique characteristic of the times. It had no Jewish antecedent, nor was it hindered by any scruple against art.

The episodes follow the manner of isolation. Examples of the continuous manner are rare, and manifestly do not characterize painting of the first four centuries. The treatment is fully realistic. The significant moment of action is isolated, and force is attained by the elimination of accessories. Details are so eliminated that the episode as constituted becomes powerfully symbolic. Yet the symbolic element pertains not so much to the painting as to the episode that it depicts and advertises by its concentrated treatment. This reflects a Roman feeling, in expression, and leads to the conclusion that the earliest Christian art is western in manner, in accord with geographical distribution.

5. A TEST IN ART APPRECIATION

Erwin O. Christensen, University of North Dakota

6. OPPORTUNITY FOR STUDY OF ANCIENT AND MEDIEVAL HISTORY IN THE MUSEUM OF BRUSSELS

Jean Capart, University of Liege

1924
July-December

ARCHAEOLOGICAL NEWS[1]

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

EDWARD H. HEFFNER, *Editor*
University of Pennsylvania, Philadelphia

GENERAL AND MISCELLANEOUS

PHILIPPOPOLIS.—An Inscription of Zeus Hypsistos.—In *R. Arch.*, fifth series, XX, 1924, pp. 47–48, R. CAGNAT publishes an inscription communicated by Mr. Diakovitch, director of the National Library of Ploudiu, the ancient Philippopolis. The text reads: *Διὶ ὑψίστῳ* | *Γ(αῖος) Μαίλιος 'Αγαθό* | *πους ὑπὲρ τῆς* | *τῶν πατρώνων* | *Γ(αίου) Μαιλίου 'Ακύλου κα(ὶ)* | *Φλαουίας Τιούτης* | *καὶ τῶν τέκνων αὐ* | *τῶν σωτηρίας καὶ ἑ* | *αυτοῦ χαριστήρι(ο)ν.* The Ζεὺς ὕψιστος mentioned is known as having been worshiped in the Balkan peninsula and the East generally by Jewish-pagan brotherhoods. The surname Τιούτα is a Thracian name of which there are numerous examples.

THRACE.—Terracottas.—In *R. Arch.*, fifth series, XIX, 1924, pp. 307–350 (8 figs.), GEORGES SEURE continues his description of unpublished or little known monuments in Thrace with an article on terracottas. The first object described and discussed is a plaque on which two warriors are represented in relief. The style is archaic Ionic. No close analogies are known. The four fragments preserved are not parts of one plaque, but of several made from one mould. They were discovered in August, 1904, at Apollonia. A résumé of all known discoveries made at Apollonia and in the neighborhood is given, with a description of the tumuli. A black glazed amphora is published and various other objects found in tumuli are described. Another object published has the shape of a shoe or a boat, but the bottom or sole is formed of cross pieces with spaces between. Possibly it is an utensil in which to grill fish. The upper part of a lecythus is published, on which were painted five women, a winged sphinx, and two men, towards one of whom a winged Nike floats holding out a garland. The painting was probably once enriched with gilding. Another illustration shows a flat plaque from the handle of a Corinthian vase of the sixth century, on which a winged sphinx is painted.

Atreus, King of the Achaeans(?).—In *R. Arch.*, fifth series, XIX, 1924, p. 403, S. R. quotes a letter of DR. EMIL FORRER in which he declares that he has discovered Atreus (Attarissyas), king of Achaea (Ahhîja) in the text of a tablet from Boghaz Keui. The date is 1240–1210. Sir Arthur Evans seems to accept the identification, but calls attention to the fact that the date separates Atreus definitely from the Mycenaean and Minoan civilization. (*London Times*, March 8 and April 8, 1924; cf. *Orientalische Literatur-Zeitung*, March, 1924.)

[1] The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor HEFFNER, Editor-in-Charge, assisted by Professor SAMUEL E. BASSETT, Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Professor SIDNEY N. DEANE, Professor HAROLD N. FOWLER, Dr. STEPHEN B. LUCE, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor JOHN C. ROLFE, Dr. JOHN SHAPLEY, and the Editors.

No attempt is made to include in this number of the JOURNAL material published after December 31, 1924.

For an explanation of the abbreviations, see pp. 115–116.

NORTH CHINA.—An Early Chinese Culture.—In *Bull. Geolog. Surv. of China*, 1923, 5 (pp. 68, 17 pls., text in Chinese), J. G. Andersson finds no sure traces of Palaeolithic or early Neolithic man, but has found a widely distributed culture of Late Neolithic type. No metal objects have been found thus far, but much pottery shows affinities to the bronze vessels of early dynasties, especially Chou. The plates show many stone knives, picks, Yang Shao artifacts, and painted pottery, linear black and white, and monochrome.

FENGTIEN.—The Cave-deposit at Sha Kuo T'un.—In *Palaeontologia Sinica*, 1923, Ser. D, Vol. I, fasc. I (pp. 57, plates 12, Chinese text), J. G. Andersson describes a deposit, the artifacts from which are to be sent to the Stockholm Museum, dating from the dawn of Chinese history, a culture stage named by him the *Yang Shao*. The text describes the plates which show cross sections of the cave, and some of the celts, stone rings, buttons, beads, bone instruments, monochrome and painted pottery.

NECROLOGY.—Albert I, Prince of Monaco.—Prince Albert of Monaco (1848–1922) was not only one of the founders of the science of oceanography, but was also the founder of the Institut de palaeontologie humaine. At his expense the grottoes of Grimaldi were excavated, as were also the most important prehistoric sites in Spain and sites in Bavaria. He provided for the publication of the results of the excavations mentioned and also of mural paintings in the caves of Spain and France. (S. R., *R. Arch.*, fifth series, XVI, 1922, p. 173.)

Ernest Babelon.—The eminent director (since 1892) of the Cabinet des Médailles at Paris, Ernest Babelon, died at Paris, January 3, 1924. He was born in 1854 at Sarrey and was educated at the little seminary of Langres and at the École des Chartes. In 1878 he entered the Cabinet des Médailles, where he was to find his life work. His first important published work was the new edition of Cohen's *Monnaies de la République romaine*. This was followed by an astonishing number of books, chiefly on numismatics, but including catalogues of antiquities, ancient bronzes, and cameos, a *Manual of Oriental Archaeology*, and a *Guide to Carthage*. He was the author of numerous articles in periodicals as well. His chief work, which is to be finished by his son, is the *Traité des monnaies grecques et romaines*, the first volume of which appeared in 1901. (S. R., *R. Arch.*, fifth series, XIX, 1924, pp. 386–389; portrait.)

Franz Boll.—Franz Boll, who, in 1908, succeeded Albert Dieterich as Professor at Heidelberg, was born July 1, 1867, and died July 3, 1924. He was especially interested in ancient astrology, with which most of his numerous and admirable writings are concerned. F. C., *R. Arch.*, fifth series, XX, 1924, p. 222 f.)

Mgr. Louis Duchesne.—In *R. Arch.*, fifth series, XVI, 1922, pp. 158–170 (portrait), S. Reinach gives an appreciative account of the life and work of Mgr. Louis Duchesne. Born in 1843, Duchesne spent his life in the service of the church and in historical and archaeological research and instruction. His most important works are the *Liber Pontificalis* (Vol. I, 1886; Vol. II, 1892) and the *Histoire ancienne de l'Église* (Vol. I, 1905, Vol. II, 1907; Vol. III, 1910), and his lesser writings are numerous and valuable. His scholarship was duly recognized both in France and in other countries. From 1895 until his death, April 21, 1922, he was Director of the École française de Rome.

Paul Girard.—Born in 1852, Paul Girard, Professor of Greek at the École Normale, member of the Académie des Inscriptions, former member of the École d'Athènes, died in July, 1922. His principal work is *L'Education athénienne au V^e^ et au IV^e^ siècle* (1889); he was also the author of monographs on the Asclepieum at Athens and on the Ancient Locrians, of an excellent little book entitled *La Peinture antique*, and of numerous articles. (S. R., *R. Arch.*, fifth series, XVI, 1922, pp. 172–173.)

Wilhelm Klein.—Born in Hungary in 1850, Wilhelm Klein was a pupil of Conze

at Vienna, then of Wieseler and Matz at Göttingen. In 1886 he succeeded Petersen as Professor of Archaeology at Prague, where he taught until he reached the age of retirement. He died February 2, 1924, at Haindorf, in Bohemia. His best known works are: *Euphronius*, 2nd ed., 1886; *Vasen mit Meistersignaturen*, 2nd ed., 1897; *Vasen mit Lieblingsnamen*, 2nd ed., 1898; two volumes on Praxiteles, 1898–1899; and his history of Greek art, in three volumes, 1904–1907. He was also the author of many articles in periodicals. (S. R., *R. Arch.*, fifth series, XIX, 1924, pp. 392 f.)

Jacques de Morgan.—Born June 3, 1857, Jacques de Morgan, one of the greatest and most distinguished of archaeologists, died at Marseilles June 12, 1924. In *R. Arch.*, fifth series, XX, 1924, pp. 204–222 (portrait) S. REINACH gives a brief account of his life and work, with extracts from his letters. His first archaeological work was in the field of prehistoric archaeology in France, but his later activity was for the most part in the East, the Caucasus, Armenia, Egypt, and Persia. He was director of antiquities in Egypt from 1892 to 1897, during which time he made important discoveries and wrote books which would have sufficed for the life work of a lesser man. Before that he was for six years in northern Persia, where his archaeological researches were of great importance. The results of this mission are published in five large volumes. In 1897 he was transferred from Egypt to Persia, and the thirteen volumes of the *Mémoires de la Délégation en Perse* (1900–1912) testify to the magnitude and success of his work.

Countess Pauline Ouvaroff.—The learned and brilliant woman who was for many years the soul of prehistoric studies in Russia, ex-president of the Imperial Archaeological Society of Moscow, the history of which she wrote (1890), died in exile and poverty at Dobrna, near Celju, in Jugoslavia, June 30, 1924. (S. R., *R. Arch.*, XX, 1924, p. 224.)

Rudolf Pagenstecher.—The death of Rudolf Pagenstecher, Professor at Heidelberg and afterwards at Rostock, occurred near the end of 1920. He was a diligent archaeologist and possessed a remarkable knowledge of Alexandrian Egypt. Among his works are: *Zur Athena Parthenos*, 1908; *Dated Sepulchral Vases from Alexandria*, 1909; *Die Calenische Reliefkeramik*, 1909; *Unteritalische Grabdenkmäler*, 1912; *Alexandrinische Studien*, 1917; *Necropolis, Untersuchungen über Gestalt und Entwicklung der alexandrinischen Grabanlegen und ihrer Malereien*, 1919. After Schreiber's death he undertook the task of finishing the publication of the *Expedition Ernst Sieglin*. (S. R., *R. Arch.*, fifth series, XVI, 1922, p. 175.)

Sir Claude Phillips.—The eminent critic, Sir Claude Phillips, was born in 1848 and died August 9, 1924. He became known as a connoisseur through articles published in the *Portfolio*. He studied especially Titian and his English imitators. In 1897 he was made conservator of the Wallace Collection and established it in Hertford House. Upon his retirement in 1897 he was knighted. For many years he was art critic of the *Daily Telegraph*. (S. R., *R. Arch.*, XX, 1924, p. 225.)

Carl Robert.—Carl Robert was born in 1850 at Marburg and died January 18, 1922, at Halle. After obtaining the degree of Doctor of Philosophy with a dissertation on the *Bibliotheca* of Apollodorus he was for several years in Greece and Italy as *Stipendiat* of the German Institute. He was Privatdocent and Professor at Berlin, then became Professor of Archaeology at Halle, where he remained to the end. At once philologist and archaeologist, he was editor-in-chief of the *Hermes*, member of the central direction of the Institute, and author of numerous monographs and articles. He also made the new edition of Preller's *Griechische Mythologie*. (S. R., *R. Arch.*, fifth series, XVI, 1922, p. 174; with bibliography.)

Henri Saladin.—Architect of the Government and laureate of the Institute, Henri Saladin died at Paris in December, 1923, at the age of 72 years. His name is permanently connected with the archaeological exploration of Tunisia, where he collaborated with Cagnat, and with the first volume of the *Manuel d'Art musul-*

man, treating of architecture, which forms a part of the Picard collection. (S. R., *R. Arch.*, fifth series, XIX, 1924, p. 391.)

Horace Sandars.—The death of Horace Sandars, whose writings disclose a knowledge of the archaeology of Spain such as no Englishman before him had exhibited, took place in February, 1922. He wrote chiefly for *Archaeologia* and *The Antiquaries Journal*. (S. R., *R. Arch.*, fifth series, XVI, 1922, p. 176.)

EGYPT

ASSIOUT.—Early Pottery and Flints.—About thirty miles from Assiout, on the right bank of the Nile, The British School in Egypt carried on during July, 1924, excavations in a deposit two metres deep, which contained wavy pottery of a kind hitherto unknown in Egypt, and numerous flints. These are almost formless at first, but grow better in the upper strata. About midway wheat is found, at the same time with "predynastic" bricks. Sir Flinders Petrie thinks that the men who lived here were not Egyptians, but represent a hitherto unknown civilization. (*R. Arch.* XX, 1924, from the *Times*, July 4, 1924.)

Nubian Pottery.—In *R. Arch.*, fifth series, XVI, 1922, pp. 44–54, Edouard Naville discusses the pottery called the pottery of Tell el Jahoudieh, which has been found in Nubia, Egypt, Syria, and Cyprus. The most important discoveries of this ware have been made by Dr. Hermann Junker, and his conclusion (see *Der nubische Ursprung der sogenannten Tell el Jahudîye-Vasen*, Akademie der Wissenschaften in Wien) that the ware is Nubian must be accepted.

BABYLONIA AND ASSYRIA

UR.—Excavations.—Since November, 1923, the British Museum and the University of Pennsylvania have been excavating at Ur. Four miles from the ziggurat of Ur, the excavations of the temple of Tel-el-Obeid have unearthed interesting objects: a standing bull of white stucco; a recumbent bull of bronze, part of a relief; polychrome flowers in white clay. The temple was built by Dungi, second king of the third dynasty (ca. 2250 B.C.). Near it is the earliest necropolis yet found in Mesopotamia (4000–5000 B.C.), in which objects of beaten copper, mingled with pottery and stone tools, have been found. From a tablet unearthed at the temple it appears that it was dedicated to the goddess Nin-Khursag and was erected by King Aannipada, son of Mesannipada, of the first dynasty of Ur (ca. 4600 B.C.). This would be the earliest written document yet discovered. (S. R., *R. Arch.* XIX, 1924, p. 399, summarized from L. Woolley, in the *Times* January 19, 1924; cf. *ibid.*, February 11, 1924.)

Babylonian Parallels to the Song of Songs.—Among the tablets discovered at Ashur was one that in form and contents bears a striking resemblance to the Biblical Song of Songs. This was published by Ebeling, *Keilschrifttexte aus Assur religiösen Inhalts*, IV, No. 158. Translations were attempted by Ebeling, *M.D.O.G.*, LVIII, pp. 49 ff.; Barton, *Archæology and the Bible*, pp. 464 ff.; Langdon, *J.R.A.S.* 1921, pp. 183 ff. A new translation with commentary is given by T. J. Meek, *J. Bibl. Lit.* XLIII, 1924, pp. 245–252. Two things are clear: (1) that the Assyrian hymns were taken from the liturgy of the Tammuz-Ishtar cult, (2) that the book of Canticles is so similar that it must have a common origin.

The Nabopolassar Chronicle.—The fragment of a chronicle of Nabopolassar covering the years 616–609 B.C., discovered by C. J. Gadd in 1923, which contains the important information that Nineveh fell in 612, and not in 606 as has hitherto been supposed, is discussed by W. F. Lofthouse, *Exp. Times.* XXXV, 1924, pp. 454–456; and by I. M. Price, *J.A.O.S.* XLIV, 1924, pp. 122–129. This chronicle gives us the names and dates of four successors of Ashurbanipal on the throne of Assyria: Ashur-etil-ilâni (626–622 B.C.), Sin-shum-lishir (622–620 B.C.), Sin-shar-

ishkun (620–612 B.C.), Ashur-uballit (612-605 B.C.). It shows also that Nabopolassar was independent of Assyria throughout his entire reign, that Assyria and Egypt were in alliance against the Babylonians and Medes, that Nineveh fell in 612, but that the Assyrian empire continued to exist until the defeat of the allied Egyptian and Assyrian armies at Carchemish in 605.

SYRIA AND PALESTINE

The Identity of Tid'al, King of Goyim, in Gen. 14: 1.—In *Z.A.T.W.* XLII, 1924, pp. 148–153, F. M. T. Böhl claims that Tid'al, king of Goyim (nations), the confederate of Amraphel, king of Shinar, Arioch, king of Elassar, and Chedorlaomer, king of Elam, in Gen. 14: 1, is to be indentified with Tud'alia I of the Hittite inscriptions, the founder of the Hittite dynasty, who reigned about 1650 B.C., not with the better-known Tud'alia II, of the Hittite inscriptions and the Egyptian records, who lived about 1250 B.C. In this case Amraphel has nothing to do with Ḫammurabi, and Abraham is to be dated 1650 B.C. rather than 2100 B.C.

The Israel Stele of Merenptah.—In *Exp. Times*, XXXVI, 1924, pp. 40–44, J. W. Jack subjects the mention of Israel in the triumphal stele of Merenptah to a fresh examination. He finds it impossible to refer the words "Israel is destroyed, its seed is not" to any event of the exodus, or to an Israel nomadizing in the desert. The context shows that this Israel was settled in the land of Canaan. He rejects the theory that it refers to a portion of Israel already settled in Canaan, while another portion remained in Egypt, and holds that it indicates that the exodus had already taken place.

New Light on the Reign of Nabonidus.—In *Babylonian Historical Texts*, 1924, S. Smith publishes a number of texts that refer to the reign of Nabonidus. One of these suggests that Nabonidus was a Syrian and unpopular with the priesthood. Another records an expedition in 553–552 through Amurru (the Amorite land) and Adummu (Edom) to Teima, the famous oasis in North Arabia. Still other texts suggest that Nabonidus may be the prototype of some of the legends concerning Nebuchadnezzar in the Book of Daniel. See also *Exp. Times*, XXXVI, 1924, pp. 44 ff.

The Siloam Inscription.—In *R. Arch.*, fifth series, XIX, 1924, pp. 117–131, D. Sidersky gives a history of the discovery (in 1880) of the Hebrew inscription which records the making of the water tunnel of Siloam, a facsimile, a French translation, an interpretation, and an exhaustive bibliography.

CHEIK SA'AD.—Various Monuments.—At Cheik Sa'ad, in the Hauran, East of Caïfa and north of Dera'a, where a colossal basalt lion of Hittite style and a monolith bearing the name of Ramses II were previously known, a Czechoslovak expedition directed by Professor Hronzy has made interesting discoveries. On the base of the monolith a dedication by the Pharaoh to the Amorite god "Arkan of the North" has been found. On the top of the tell is a ruined Mussulman sanctuary, remains of a Ghassanide basilica, superposed upon a Greek temple, under which is an Amorite sanctuary. Below the sanctuary is the débris of a large building made of blocks of basalt, probably the palace of the Amorite kings of Bashan. It was paved with brick, an evidence of Babylonian influence. Two storerooms under this pavement contained baskets of carbonized grain and three tombs orientated east and west. Fragments of Hittite sculpture, a warrior with pointed helmet and a roaring lion, were found near at hand. A fragmentary inscription shows that as early as the eighth century the Amorites had adopted the Canaanite writing. Details are wanting concerning the sculptures of the Greco-Roman period and the Greek inscriptions found. (S. R., *R. Arch.* XX, 1924, p. 233, from the *Times*, June 28, 1924, p. 11.)

JERUSALEM.—Excavations on the Eastern Hill.—The results of the excavations at Jerusalem carried on conjointly by the Palestine Exploration Fund and the *London Daily Telegraph* are given by G. Duncan in *Pal. Ex.*, LVI, 1924, pp. 124–135; 264–279, 8 plates; 12 figs. The Eastern wall of the Jebusite or Pre-Davidic city has been uncovered. The date is determined by underlying chips of pottery which belong to the Late Second and Third Bronze Age, 1600–1400 B.C. There are at least three different periods represented in the masonry—Jebusite, Davidic, Solomonic, and probably of the time of Nehemiah's restoration. Three caves have been uncovered which yielded pottery of the Bronze Age. An early ostracon, and a number of inscribed jar-handles have also been discovered. The age and significance of the inscribed objects are discussed by S. A. Cook, *ibid.* pp. 180–186.

KISH.—Excavations.—In *R. Arch.*, fifth series, XIX, 1924, p. 398, p. 399, and XX, 1924, pp. 231 f., are summaries by S. R. of articles in the *Times* (January 22, February 26, June 27, 1924) about the important excavations at Kish carried on by Oxford University and the Field Museum. A library of tablets containing Sumero-Babylonian grammars and dictionaries, a great Sumerian palace with circular pillars, stairs, and walls on which are inscriptions in very early pictographic characters, various other inscriptions, much sculpture in relief, a fine bronze stag, three dogs of polychrome terracotta, two figurines representing Papsukkal, the messenger of the gods, and a great number of other remains were unearthed.

PALMYRA.—Paintings and Sarcophagi.—In the *Times*, June 20, 1924, four objects found in the excavations at Palmyra are reproduced, viz., two mural paintings found in a tomb, the draped figure of Hairan, son of Taimarsou (inscription) and a half-nude reclining Dionysus; the lower part of a sarcophagus adorned with four busts; a sarcophagus representing a reclining person and three smaller persons. (X., *R. Arch.* XX, 1924, p. 233.)

TANTURAH.—A Greco-Phoenician Temple.—The excavations of the British School of Archaeology in Palestine have brought to light at Tanturah a large Greco-Phoenician temple of early Ionic style. It is supposed to be a temple of Poseidon. In a mausoleum at Tel-Barak, which had previously produced a sarcophagus with reliefs representing a battle of Amazons (published in the *Times*, November 9, 1923, and in *Beaux-Arts*), a new sarcophagus with reliefs has been found. (S. R., *R. Arch.* XX, 1924, p. 231.)

ASIA MINOR

GALATIA.—Inscriptions and Monuments.—A number of ancient inscriptions, including pagan and Christian epitaphs, honorary decrees, and inscriptions on buildings, were found and copied by R. d'Orbelliani with the aid of native workmen, in the course of a three years' captivity at Angora, 1915–1918. Of 81 from Angora itself, those which are new or which furnish corrections of earlier versions are published, with some facsimiles and other drawings, in *J.H.S.* XLIV (1924), pt. I, pp. 24–44. Among the details noted are the occurrence of the Gaulish name Bokerex, the survival of the loop of the Egyptian ankh at the bottom of the sculptured cross, and the dating of events by months and by the days of the week. Most of the stones are now either built into walls or used as tomb stones in the Jewish and Armenian cemeteries. The two longest inscriptions, both on white marble, are a decree of the Galatian Koinon, from the reign of Trajan (64 ll.), in which the erection of the statue of Augustus is mentioned, and a decree of the guild of Dionysiac artista (55 ll.) in honor of Ulpius Aelius Pomponianus. This last and many other inscriptions lie so exposed to weather damage that they will soon be entirely obliterated.

GREECE

Archaeology in Greece, November, 1922–November, 1923.—In *B.C.H.*, XLVII, 1923, pp. 498–544 (11 figs.) there is the usual summary of archaeological work done in Greek lands during the year. Under the head of museums, mention is made of the project for adding a story to the National Museum in Athens, and reorganizing the Byzantine collections. An appropriation was granted for urgent repairs to the museums at Delphi and Olympia, and attention is called to the poor condition of the provincial museum buildings in Greece. Of the excavations conducted during the year, those to which most attention is given are those of the French at Delphi (pp. 513–519, figs. 1–4): Ptoion (p. 521 and fig. 5): Delos (pp. 525–529, figs. 6, 7), where a fine archaic male head was found: Mallia in Crete (pp. 532–534, fig. 9): Philippi (pp. 534–536): and Thasos (pp. 536–540, fig. 10), where the important colossal statue of the criophorus recently discovered in the acropolis, and dating in the early archaic period, has been set up outside the museum. In addition to these excavations of the French, a full account is given of Sir Arthur Evans's work at Cnossus during the year (pp. 529–532), and of preliminary excavations conducted by the German Archaeological Institute at Paros and Naxos (p. 529 and fig. 8).

CNOSSUS.—New Discoveries.—Near the great palace at Cnossus Sir Arthur Evans has discovered the remains of a pillared portico forming a monumental entrance, and those of a Cyclopean viaduct which is said to be the most important construction as yet discovered in Crete. Other discoveries are the ruins of what may be a caravansary and those of an elegant little pavilion, with remains of paintings and a decorative frieze in which birds are especially noticeable. (S. R., *R. Arch.* XX, 1924, p. 237.)

NOTION.—Excavations, 1921.—In 1913, the French School at Athens began the clearing of the sanctuary of Apollo Clarios at Colophon, and made a survey of the acropolis at Notion, its seaport, which seemed to offer great possibilities (see *B.C.H.* XXXIX, 1915, pp. 37 f.). The work of excavating this site was undertaken in 1921, and the first part of the report of the campaign, by R. DEMANGEL and A. LAUMONIER, appears in *B.C.H.* XLVII, 1923, pp. 353–386 (24 figs.; pls. X–XIII). This report is devoted to the topography, remains of buildings, and inscriptions found. Notion is situated on the coast, about ten miles from Colophon, with a small but safe harbor. The fortification walls, of solid ashlar masonry, are still largely preserved. The city itself extended outside the acropolis, to the north and east. The buildings identifiable at present are a theatre, a dicasterium (?), a gymnasium(?), and a temple, proved by an inscription to be dedicated to Athena. In addition, two agoras have been found, one in the centre of the city, the other in the eastern quarter. The principal work of the campaign lay in the uncovering and identification of the sanctuary of Athena, consisting of a small temple and an altar, surrounded on all four sides by a stoa, facing approximately east and west. This stoa is of the Doric order; a large part of the stylobate and fragments of the columns have been found, but of the entablature nothing that can be certainly identified. The sanctuary was entered by a gate at the northeast corner, leading to a street that skirted the sanctuary, on the west side of which a row of shops was found, which yielded rich finds of terracottas and other objects, to be published later. The altar has been destroyed by treasure hunters, and so is in poor preservation. The temple is a small *templum in antis* of the Corinthian order; of the columns and entablature enough has been found to enable a restoration of the façade to be drawn. It is dated in the time of Hadrian. Of the inscriptions, the most important is the one which identifies the sanctuary,—a dedication by Zosima, priestess of Athena. Of the other inscriptions the most important are one proving the existence at Notion of a society of

the Asclepiastae, and an epitaph, recalling the funerary epigrams of the Anthology. A number of stamped bricks, amphora handles, pottery fragments, and a few coins complete the series of inscriptions.

THASOS.—Excavations, 1921–22.—In *B.C.H.* XLVII, 1923, pp. 315–352 (19 figs.; pls. VI–IX) G. Daux and A. Laumonier give an account of the campaigns conducted in those years by the French School at Athens. The greater part of the article is devoted to the topography of the site and the architectural remains found. These consisted of the uncovering of the agora and of the theatre, while preliminary trenches also resulted in the discovery of the precinct of Dionysus, and in one of the city gates. The uncovering of the agora, begun in 1920, was completed, and its dimensions and plan were established. It was enclosed by stoas on all four sides except a portion of the east, of which the northern is the most elaborate. The order throughout is Doric, and the date assigned is the end of the fourth or beginning of the third century B.C. On the east, midway between the Prytaneum and the northern stoa, a curious building was discovered, looking towards the southwest angle of the agora, and directly opposite the entrance of the Hypostyle Hall, discovered in 1912, thus forming one end of one of the principal streets of the ancient city. This building apparently belongs in the beginning of the third century B.C. It had a central entrance between two projecting wings, and the façade was in the form of a Doric colonnade *in antis*. It is suggested that it was a council hall, and a comparison with the bouleuterion at Mantinea is made. It may also have been a lesche, although the authors do not consider this quite as probable. To the northeast of the agora the wall of an enclosure was discovered, which was identified as the precinct of Dionysus by a dedicatory inscription found associated with it. The excavation of the theatre was not completed, owing to the thickness of vegetation, but evidence was found showing a Roman theatre superposed on a Greek theatre dating possibly as early as the end of the fifth century B.C. Of the sculptures found, the most interesting is an archaistic head of Zeus, or perhaps Dionysus, belonging to a herm, dated in the fourth century; a small torso of a boy of Hellenistic workmanship; a votive relief of the second century B.C., representing Helen and the Dioscuri; and a relief of late workmanship of a man riding on a dolphin, identified as Arion. A number of small terracottas, a fine fragment of an Attic black-figured crater (quadriga) and a handsome Byzantine six-ounce weight complete the list of minor objects found.

ITALY

CENTURIPE.—Forged and Falsified Terracottas.—In *R. Arch.* XX, 1924, p. 240, P. Orsi issues a warning against the works of a combination of secret excavators at Centuripe (Sicily) with clever workers in terracotta, which has resulted in putting on the market many terracottas (busts of Demeter and Cora, Hellenistic figurines, figurines of the infant Eros, and of nude women) made by placing together ancient fragments and completing them with new parts.

SPAIN

TARTESSUS.—The second campaign in the search for Tartessus took place in Sept.–Oct., 1923, supported again by the Duke of Tariffa, owner of the Coto Doña Ana, the vast and almost uninhabited district of southwestern Spain which includes the mouths of the Gaudalquivir, anc. Baetis. It consists of swamps, sand dunes and forests and is used only as a hunting ground. The earlier explorations had established the positions of the two ancient outlets of the river at Matalascañas and Torre Salabar, and eliminated from consideration the former, the "western fork" of Strabo. The site of Tartessus, which was destroyed about 500 B.C., was therefore to be looked for on the right or northern edge of the eastern

channel, between Pico de Caño and Torre Salabar. The work of excavating was devoted to a small Roman settlement in the eastern part of this line, between Pico de Caño and Trigo, which, to judge from the copper coins found, had existed for about 300 years, A.D. 200–500. It was a mere fishermen's village, of little size or importance, and the large, carefully cut building stones which were found cannot have been brought from the nearest quarries in the mountains by these humble folk, and must therefore have been taken from the ruins of Tartessus. Vats for salting fish were found and among the modest offerings in the grave-yard was some Visigothic pottery, but the most important find was a cylindrical copper finger-ring with inscriptions both inside and outside, which are neither Greek, Roman, Iberian, Phoenician, nor Libyan, though some of the characters resemble Greek letters. As both inscriptions appear to be divided into three parts, which in the case of the inner one are identical, they may be mottoes or proverbs, and the ring itself an amulet. The remains of Tartessus must be near this settlement, though not directly beneath it, and they are probably now below the level of the ground water, as the whole coast seems to have sunk. The search must be continued to the west of Trigo, by digging in the hollows between the ridges of accumulated sand. A. SCHULTEN, *Arch. Anz.*, 1923–24, pt. 1–2, cols. 1–10; fig., map, facsimile.

PORTUGAL

Religious Ideas of the Lusitanians.—In *R. Arch.*, fifth series, XVI, 1922, pp. 128–157 (fig.), J. LEITE DE VASCONCELLOS defends himself against the aspersions of M. Toutain (*Les cultes païens dans l'empire romain*, Pt. I, Vol. III, Chap. ii, pp. 121–192) and publishes a French translation of pp. 84–94 of the third volume of his *Religiôes da Lusitania.*

FRANCE

FINISTÈRE.—Prehistoric Necropolis.—In *R. Arch.*, fifth series, XIX, 1924, pp. 179–194 (2 figs.), Commandant BÉNARD describes the necropolis of Saint Urnel and that of Roz-an-Tre-Men and gives some information about the peninsula of La Torche at Finistère, where excavations have been carried on for some five years. The stratification is clear, and the burials continued from very early times to the period of La Tène III, and some tombs are as late as the beginning of the Christian era.

LYONS.—A Statuette of Mars.—In *R. Arch.*, fifth series, XIX, 1924, 1–4 (pl.), HENRI LÉCHAT publishes a bronze statuette of Mars which was found at Feurs (Loire) in 1891 and is now in the collection of Mr. Claudius Côte, at Lyons. The god wears a Corinthian helmet, a cuirass, and greaves. The lance which he brandished in his right hand has disappeared, as has the small shield which he held in his left hand. Two statuettes in the British Museum (Walters, *Catalogue of Bronzes*, pl. xxiii, 798 and 1071) are compared with this, the date of which is probably the second century after Christ.

NÉRIS.—Two Ancient Bronzes.—In *R. Arch.*, fifth series, XIX, 1925, pp. 301–306 (pl.), ADRIAN BLANCHET publishes two bronze statuettes found at Néris (Allier) a few years ago. The first is a group of Bacchus seated on his panther. Certain parts show traces of incrustation with a metal different from the bronze of which the group is made. The workmanship is poor. The second bronze is a child, clad in a short garment fastened about the waist. On his left wrist he has a small closed basket or box, and in his raised right hand he holds what may be a bunch of grapes. On his head he wears an inverted basket like those used in gathering grapes. The child may be a young worker at the vintage. This statuette also is of poor workmanship; the hands are especially rude and exaggerated. Both statuettes were no doubt made in Gaul.

RENNES.—Two Bronze Statuettes.—In *R. Arch.*, fifth series, XIX, 1924, pp. 215–222 (7 figs.), Paul Couissin publishes two bronze statuettes, probably from Egypt, which have been in the archaeological museum at Rennes since 1901. One represents a female dancer or acrobat, who wears only a cache-sexe, bands about the knees, and sandals. The right foot and the left arm, which was raised high, are missing. The broken object in the left hand was probably a sistrum. The style is good. The other bronze is of far less artistic interest. It is the foot of a vase or tripod, and has the form of a serpent-tailed dragon swallowing a man feet foremost. The head, arms, and shoulders of the man are alone visible. The dragon's tail ends in a trefoil. Under the raised head of the dragon is a support on which are two human heads in profile facing each other. The dragon has in part the appearance of a crocodile. The representation appears to be unique.

Protohistory of Southern France and the Hispanic Peninsula.—In *R. Arch.*, fifth series, XVI, 1922, pp. 1–43 (map), Léon Joulin enumerates the sites in Southern France and the Hispanic peninsula at which remains have been found dating from the eighth century B.C. to the coming of the Romans; he describes briefly the objects found at each site, discusses the different civilizations met with, their geographical distribution, and the chronological indications furnished by the remains; he then gives a brief history of the long period under discussion and a bibliography.

SOUTHERN FRANCE.—Excavations of Roman Remains.—In *R. Arch.*, fifth series, XIX, 1924, p. 410 is a brief record (from the *Débats*, March 2 and 23, 1924) of excavations in Southern France undertaken by the Commission des Monuments Historiques and directed by Jules Formigé. At Vienne (Isère) an immense theatre, larger than the one at Orange, has been attacked. The foundations for forty rows of seats, with their approaches, have been found. At Orange (Vaucluse), in the gymnasium, is a temple 22m. long, on a podium 3.75m. high the upper cornice, adorned with lion's head gargoyles, is 1.20m. high, indicating that the columns should be about 15m. in height. The temple was peripteral, and in front of its platform was another platform 56m. long, with a semicircular colonnade 74m. in diameter. Beyond were gardens with fountains and colonnades. Two great stairways led up to a second temple, above which rose a vast wall to sustain the upper city. At Saint Rémy (Bouches du Rhone), beside the temple of Silvanus, discovered the previous year (the only known temple of Silvanus), a colonnade of square plan has been brought to light, the Doric order of which, entirely Greek in type, is unique in Gaul. At Fréjus (Var) a Roman street with façades of houses has been uncovered. At Vaison (Vaucluse) the excavation of the theatre has been continued, a street with several houses has been uncovered, and a new bath has been found. At Aix les Bains a piscina paved with white marble has been found, and in it a magnificent white marble torso of Hercules.

SWITZERLAND

GENEVA.—Greco-Egyptian Terracottas.—In *R. Arch.*, fifth series, XX, 1924, pp. 80–158 (12 figs. representing 39 objects), W. Deonna gives a catalogue of about a thousand Greco-Egyptian terracottas (and a few limestone figurines and reliefs) in the Museum at Geneva. Most of them are so-called Fayûm terracottas, and of these the majority date from the first and second centuries after Christ. Technically they are poor. Their purpose is to gain protection and benefits from the gods, especially fecundity, health, and prosperity. They were used as lamps, vases, amulets, and votive offerings. Greek types are imitated, often assimilated to Egyptian types or fused with them. Gauls, negroes, Egyptians, children, pygmies, various animals, and persons engaged in various significant acts are represented, in addition to numerous deities, most of whom are directly connected with fertility, fecundity, health, and prosperity. Such are Serapis,

Isis, Isis-Aphrodite, Harpocrates, Harpocrates-Eros, Horus, Athena-Neith, Bes, Besit, Priapus, Silenus, Pan, and a few more. Divine animals, the Sphinx, Apis, the sacred cow, and cynocephali are also represented.

Some Engraved Stones.—In *R. Arch.*, fifth series, XVIII, pp. 135 ff. (fig.), W. Deonna published an engraved stone, now in Geneva, on which is represented an ibis attached, apparently, by a cord to some objects which stand on an altar. *Ibid*, XIX, 1924, p. 419 (fig.), A. Merlin adds three similar stones.

Three Statuettes of Ephesian Artemis.—In *R. Arch.*, fifth series, XIX, 1924, pp. 5–23 (6 figs.), W. Deonna publishes three terracotta statuettes of the Ephesian Artemis, which were acquired in Smyrna and are now in the Musée de l'Art et de l'Histoire at Geneva. The classic, many-breasted type may possibly have been created when the temple at Ephesus was rebuilt about 350 B.C. Two of these statuettes are of the usual type, the third holds out in her hands some wide drapery which is explained as a veil. This and the various attributes of the goddess are discussed at some length. The protecting goddess, with cosmic attributes and powers, may be the remote ancestress of the Virgin of Pity, the *Mater Omnium.*

POLAND

GOSZCZYNNO.—A Terra Sigillata Vase.—In *R. Arch.*, fifth series, XIX, 1924, pp. 295–300 (fig.), Wladimir Antoniewicz publishes a vase of terra sigillata which was found in 1921 at Goszczynno, in the district of Leczyca, Poland. The decoration, in relief, consists of an egg moulding and below this a series of arches, circles, and colonettes. The type corresponds to No. 37 of Déchelette and Dragendorff, No. 231 of Behn. It is prevalent in the latter part of the first century of our era. Other discoveries show that products of Gallo-Roman industry were imported in considerable numbers in the territory called Vandal, in the upper valley of the Warta. In this vase were charred bones on which were placed an iron knife, a clay bead, an iron rivet, and seventeen small objects of very thin gold, cone-shaped, with vertical channels.

GREAT BRITAIN

BIDFORD-ON-AVON.—Anglo-Saxon Objects.—The *London Times* of March 21, 1924, publishes photographs of Anglo-Saxon objects found at Bidford-on-Avon in excavations carried on in 1922–1923 by Mr. John Humphreys. The objects include a large gilded fibula, a wooden bucket with bronze hoops, and four brooches. The date is between 500 and 560 A.D. (X., *R. Arch.*, fifth series, XIX, 1924, p. 412.)

FOLKSTONE.—A Roman Station.—In *R. Arch.* XX, 1924, pp. 247–248, S. E. Winbolt reports the discovery and partial excavation in the Spring of 1924 of a Roman station near Folkstone. So far the remains uncovered are those of a large villa—rooms and corridors, two hypocausts, and a bath. The place appears to have been inhabited during three centuries at least. Urns were found containing bronze objects (three fibulae, a bracelet, and a ring) and a silver fibula, all belonging to La Tène III and IV. Coins date from the time of the Roman conquest, or earlier, to Constantius II. No traces of any military structure, such as might have been expected at this point, were found.

NORTHERN AFRICA

VOLUBILIS.—The Inscription on the Triumphal Arch.—In *R. Arch.*, fifth series, XIX, 1924, pp. 114–116, A. Piganiol restores line 4 of the inscription on the triumphal arch at Volubilis (*C.I.L.* VIII, 9, 993 and p. 976, 21.828; R. Cagnat, L. Merlin, L. Chatelain, *Inscriptions latines d'Afrique*, Paris, 1923) to read *erga universos et novam supra omnes re(tro prin) cipes,* etc.

EARLY CHRISTIAN, BYZANTINE, MEDIAEVAL, AND RENAISSANCE ART

ITALY

ROME.—Christian Inscriptions.—In *R. Arch.*, fifth series, XX, 1925, pp. 159–164, Seymour de Ricci gives a brief history of the publication of the Christian inscriptions of Rome begun by J. B. De Rossi, the first volume of which appeared 1857–1861. No further volumes appeared. Now the first volume has been re-edited (*Inscriptiones christianae Urbis Romae septimo saeculo antiquiores colligere coepit* Johannes Baptista De Rossi, *complevit ediditque* Angelus Silvagni, t. I. Rome, Befani, 1922, lxiv, 516 pp.) by Angelo Silvagni, who is to continue the work.

The Hypogaeum of the Viale Manzoni.—In *R. Arch.*, fifth series, XIX, 1924, pp. 405–409, is an article by H. Chéramy (from the *Débats*, April 22, 1924) on the frescoes of the subterranean tomb of the Aurelii in the Viale Manzoni at Rome (see Ducati, in his *Arte Classica*, and Bendinelli, 'Il monumento sepolcrale degli Aureli al viale Manzoni,' *Memorie dell' Academia dei Lincei*, 1923). He adopts Mgr. Wilpert's explanation of the paintings in the chamber to the left as the Sermon on the Mount and the miracles which follow in the gospel of Matthew; in the upper chamber, the temptation of Eve appears to have been represented. The paintings of the chamber to the right have not yet been satisfactorily explained; they probably illustrate the doctrines of some obscure sect.

The Pantheon and the Académie royale d'Architecture.—In *R. Arch.*, fifth series, XIX, 1924, pp. 351–361, Henry Lemonnier publishes extracts from the records of meetings of the Académie royale d'Architecture and gives an account of the interest displayed by the Académie during the seventeenth and eighteenth centuries in the Pantheon in Rome.

ROUMANIA

BUCHAREST.—The Congress of Byzantine Studies.—In *R. Arch.* XX, 1924, pp. 243–246, is a brief account by Henri Grégoire (from the *Débats*, July 6, 1924) of the Congress of Byzantine Studies, held at Bucharest in the second fortnight of April, 1924. Twelve nations were represented by sixty scholars, among whom are some of the most distinguished Byzantinists. All branches of Byzantine studies were discussed, and excursions were made to many interesting places in Roumania.

NEWS ITEMS FROM THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

The reports of the excavation campaigns of last summer have come in from some of the Archaeological Schools and also from the Greek archaeologists. In addition to the work reported in the last number of the JOURNAL M. M. Picard and Replat of the French School made a special study of the interior arrangement of the great temple of Apollo at Delphi and were unable to find any evidence for inner rows of columns. A close examination of the ruins led them to conclude that a part at least of the cella was without a roof, and that on the sides there was only, as at the Heraeum at Olympia, an arrangement of socles, 1.26 m. wide, with perhaps little perpendicular side walls forming chapels. From the side wall of the temple near the *adyton*, there would have been a great grille running across the interior from north to south; that which M. Courby took for the *adyton* itself appears to be only the rectangle of the *oikos*.

M. de la Coste-Messelière continued the clearing of the west portico of which the plan now appears very plainly. A rather late Roman rebuilding changed the entire east half into Baths; this rebuilding came before the ruin of the portico and the fall of the interior supports, one of which remains *in situ* in the pavement of the Baths. The Byzantine church on the east has been cleared as well as the court in front which was formerly covered with bases and votive monuments. Among the new inscriptions found (a dozen), there should be noted especially: a new fragment of the accounts of the fourth century, a metrical inscription of the third, probably an epigram from the statue of a horseman, the signature of a sculptor of the Rhodian school, four manumissions (second and first century B.C.), one of them gives the name of a new archon, and three the names, previously unknown, of *bouleutai*.

At the Hermeion the excavations were carried to a great depth and the successive stages in the progress of this little archaic sanctuary were determined. Here were found, at the bottom, neolithic sherds of a very characteristic style, above them fragments of geometric vases and finally a layer exclusively "Corinthian" (VII and VI centuries). In the Geometric period there appears to have been only one sanctuary, in the region already explored, but there were two later ones in the early archaic period. An abundance of fragments of beautiful Corinthian vases were recovered, some with very fine human figures (the series is being repaired). The bronzes mentioned in the last JOURNAL were found here. The sanctuary was abandoned at the beginning of the fifth century.

Several changes were made in the Museum: the mounting and restoration of the statue of Aparos (?), or Agelas, from the ex-voto group of Daochos; studies and restoration of the frieze of the Siphnian Treasury were made. A new epigraphical storehouse is being constructed to shelter, as much as possible, the inscriptions which have been left heretofore in the excavations and which suffered from exposure.

At Delos M. M. Picard and Replat resumed work in March 1924, giving especial attention to the Artemision, the terrace south of the Cabirion and an unexplored sanctuary at Phourni.

The terrace to the south of the Cabirion, at the edge of the upper reservoir of the Inopos, appears to have been occupied by archaic sanctuaries, opposite to the Heraeum (to the east); a temenos, belonging to the Cabirion, surrounded by a wall and a portico on three sides, was identified, its limits determined and cleared during the autumn. The extent of the construction of the Cabirion has been thus established. It may be that the neighboring region to the south is that of

the Herakleion. The chief result of these excavations has been the bringing to light of an archaic curb wall, surrounding, on the west, the upper basin of the Inopos, which appears indeed, from this to have been the real λίμνη τροχοειδὴς of Herodotus (II. 170) near Cynthus. This whole region would then take on added importance in connection with the history of the Delian cults, the lake in the plain having been only a Hellenistic successor to this. The archaic wall of the upper lake was cleared for about thirty metres, with its curbing and an emissary on the north very strongly built with foundations on the rock.

In the Phourni region they began to clear a sanctuary open to the sea and forming an almost perfect rectangle, 53 m. by 25 m.; a road uniting this region with that of Cynthus was found and towards the east were discovered the remains of a stepped approach, the temple itself and the base of the cult statue. Towards the west a sort of portico opens out and in this was found the fragment of a bilingual inscription, Greco-Phoenician offering of a Tyrian, Poumai-Pygmaios (1st century A.D.). This dedication suggests that the sanctuary at the edge of the water was frequented especially by Orientals who could disembark there before going up to make their prayers in the other little sanctuaries grouped around Cynthus.

Excavations were carried on at Philippi in the month of May and centered on the theatre, the porticoes of the agora and the basilica of Derekler. In the theatre M. M. Charbonneaux and Chapouthier finished clearing the left side of the orchestra, as well as the northwest parados. One may now trace the stages in the plan of this parados wall, which represents in brief the history of the whole edifice. During the imperial epoch, in the course of the third century, a place was set aside for the worship of Nemesis, in connection with the *venationes* and gladiatorial games held in the theatre. This curious arrangement was found together with inscriptions and sculpture (cf. *B.C.H.* 1924, XLVIII, pp. 287 ff.).

In the region around the porticoes, the substructures of a building belonging to the Roman agora were discovered.

At Derekler, the excavations were concentrated on the right side of the basilica where the stylobate of the interior colonnade was cleared. A new inscription was found, in "old Bulgarian," similar to that found last year; it throws light upon the history of the struggles which divided the inhabitants of the country in the tenth century. They discovered also a very beautiful capital of the interior colonnade. The side chapel on the right has been traced and shows a plan very like that of the baptistery (left side), but without the fount, naturally, and with slightly thicker walls. A trench to the north of the Drama-Cavalla road brought to light, along the Byzantine wall, the substructure of a part of the Macedonian wall, belonging to the defensive system of the gate called Neapolis; at the end of the imperial period there stood near here a large bronze statue of a personage wearing a cuirass (the type of the statue from Barletta). Search for pieces of this statue could not be made without tearing up the road, which is impossible at present.

At the Dionysion in Thasos the limits of the sacred precinct were traced and the foundations of part of the enclosing wall were found. The excavators recovered a late dedication offered by a mystic Dionysiac brotherhood, connected with the Dionysion; an interesting ex-voto of the *apologoi* to the hero Pontos (end of the IV century B.C.); another dedication of the same magistrates to Agathos Daimon, who was honored in the precinct of the Dionysion (altar discovered last year); this inscription dates from the beginning of the III century; a new inscribed base, with the names of the dedicators (magistrates) seems to belong to the middle of the same century. The clearing of the choragic monument and

its surroundings has been completed; near it was found the lower part of a seated archaic statue of good workmanship.

At the so-called Semele archaic gateway, the investigations were completed. The gate belongs to the wall built in 494 B.C. and therefore permits us to date the curious relief still in place, with Hermes, Semele, Dionysos and Ino (or Persephone). This gateway, which opens on a small stretch of sandy shore, was used perhaps for certain mystic ceremonies in connection with the Dionysiac cult. During the work in this region there was found a very important inscription, forty-three lines long dating from the second century B.C. It is a decree of the brotherhood of Serapiasts of Thasos and determines the relative antiquity of this brotherhood whose existence was suspected. The text gives interesting details concerning the organization of the society, already numerous, and sets forth in part the conditions for the sale of the "eponymy," an office to which were attached certain specified privileges.

On the Acropolis the extreme southern point of the Venetian fortress was cleared, with a very well preserved guardroom, with walls of marble and a corridor approaching it also of marble. Two inscriptions were recovered: one has the beginning of a decree of about the year 300 (archonship of Pheidippos Chrysorou, *I.G.* XII^8, 287, 1.5); the other (first century A.D.) is a fragment of a dedication to Hermes and to a divinity "protectress of the city." Many fragments of archaic statues were also found, a male torso, head of a sphinx (?).

The substructures of a precinct wall were brought to view between the Bouleuterion and the Silenus gateway. Excavations will be resumed here next year. Near the gateway of the Lions two parastades of a new city gate were discovered, with the wall perhaps flanked by a tower at this point.

The only considerable remaining part of the ancient city of Aegina is the well-known temple on the hill which juts out into the sea north of the modern town. Up to the beginning of the nineteenth century two columns of the opisthodomos still stood with their architrave; today only the shaft of one column remains. The proximity of the modern town and the sea has always made the ruins a convenient quarry. The uncertainty as to the identity of the temple has now been settled by the discovery of an archaic boundary stone: it is the sanctuary of Aphrodite Epilemeni mentioned by Pausanias.

The temple was first investigated by Cockerell in 1812 without the success he had hoped for; the only piece of sculpture he found—an archaic foot—he presented to the Glyptothek in Munich. Excavations were conducted here in 1894 by Stais, who laid bare, east of the foundations of the temple, prehistoric and archaic houses with abundant remains of pottery. In 1904 Furtwängler, through the generosity of von Basserman-Jordan, began excavations which were interrupted by his death in 1907. His most important find (unfortunately an isolated discovery), namely, the severe sphinx, a copy of which now adorns his tomb, was published by him.

The object of the present Bavarian excavations in Aegina, carried on by Mr. Paul Wolters and Mr. Welter-Mauve, with the funds for the most part contributed by Dr. James Loeb, was to unite as far as possible into a connected whole the separate earlier excavations which still remained without proper relation to each other. Up to the present time the following results have been accomplished:

The prehistoric houses first found by Stais have been further cleared and a palace-like structure can now be recognized on the east side of the hill. The wall around it, provided with towers, is 3.80 m. thick and stands to a height of 2.20 m. Its date is determined by the masses of pottery found, characteristic Aeginetan vases decorated with linear patterns in dull paint, and also by a few sherds of im-

ported Kamares ware. It has not yet been definitely determined what buildings belong to the more ancient monochrome pottery, sometimes decorated with incised patterns. Perhaps they lie farther to the west where a strongly fortified settlement, consisting of single houses, immediately adjoins this area. The walls of this settlement, several times strengthened and extended, with an especially well-protected gateway, have not yet been cleared to their complete preserved height (5.00 m. at one point).

After the ruin of the great house (the palace) a settlement spread over the region east of the temple which can be sufficiently well dated by its remains (late Mycenaean vases and graves), though the unusually close succession of strata makes subdivision very difficult. A clear, connected layer with houses and a street first appears with the fine house cleared by Stais. This layer cannot, however, be attributed to the seventh century, but is at least a century later. A mould for making a small bronze ring of an early Proto-Corinthian type and other remains of a foundry give a fixed point before the construction of these houses. Two periods may easily be distinguished in these houses by the direction of their chief rooms. Stais' fine house belongs to the later period. Over this layer extends for some distance a floor made of light poros chips and dating from the end of the sixth century. The masses of earth spread out in its construction contain unusually numerous and good remains of Proto-Corinthian and Corinthian pottery. These latter as well as the sherds from the pit (*bothros*) discovered by Stais come from the more ancient sanctuary of Aphrodite. That the latter already possessed a temple of some consequence is shown by the remains of a large semicircular acroterion of Proto-Corinthian style (diameter 1.28 m.). The finds made by Stais (sacrificial dishes) prove that the cult goes back to the period of the Geometric style; similar sherds were found also in the present excavations, scattered over a wide area. The commercial relations of Aegina, especially with the east, are reflected in the imported objects, which, though scanty, are of various kinds, among them remains of ostrich eggs, Naucratite faïences, scarabs, so-called Rhodian vases and terra-cottas. Some fragments of Cyprian vases and terra-cottas indicate the source from which Aegina got its bronze.

The levelling by means of the poros chips mentioned above must be contemporary with the building of the present temple. The conjecture that the sphinx found by Furtwängler was an acroterion of this temple, which accordingly might be dated about 460 B.C., must be abandoned. The well-preserved capitals which are now known show that the temple is somewhat older than that to Aphaia. Furthermore, the discovery in the recent excavations, of the torso of a crouching marble sphinx (0.70 m. high), of Roman date, suggests that the sphinx for some reason enjoyed special favor in this sanctuary. In spite of the advanced state of ruin the plan and reconstruction of the temple may still be determined. The problem whether and to what extent the archaic sculptures, which are for the most part very fragmentary, belonged to the temple still needs clearing up. The upper part of the body of an archaic maiden is probably to be regarded as a separate work. A relief, the interpretation of which is not quite clear, showing two chariots moving in opposite directions is probably sepulchral.

Only a few other buildings belong with the temple, notably a small propylon on the south. When toward the end of classical times this sacred enclosure was transformed into a fortress the propylon was remodelled into a broader entrance permitting the passage of vehicles. Extensive remains of the wall of this period, built of ancient building material, have been found, especially on the north. At one point it still stands to a height of 5.00 m. and the blocks of an earlier building used here bear inscriptions of the Roman period referring to *Damothoiniai* to which well-to-do patrons invited the citizens with their families.

The investigations begun by Furtwängler at some other points on the island

could not be resumed as yet. This was true especially of the town site on the summit of Mt. Oros which was inhabited from the archaic period onward; and to the sanctuary of Zeus Panhellenios at which a fountain with a peculiar arrangement was cleared. The most important find at this latter place was a completely preserved archaic bronze hydria with a dedication to Zeus Hellenios.

Excavations in Regilla Street in Athens near the eastern edge of the Roman city, conducted by Mr. Pappadakis at the request of the Ministry of Education, disclosed part of a late Roman house which was found to extend from the courtyard of a house under construction into the adjoining property of Mr. Diomedes, Director of the National Bank. The walls are constructed in the usual style of the period with lime mortar but without bricks, and contained many ancient architectural members, thrown together in great confusion. From these walls each of the property owners had obtained a large marble relief (0.80 x 1.58 x 0.20 m. thick). A third slab of the same dimensions was brought to light in the official excavations and all three, together with five or six pieces of cornice and epistyle, were transferred to the National Museum.

On the central slab are two Victories sacrificing bulls with Dionysus between them. He stands facing full front, a beardless, draped figure, holding a thyrsus and a phiale; on his left is a youthful companion, nude, who holds a wine jar. Both the Victories are represented according to the well-known prototype of the Balustrade of Athena Nike, holding the bulls which are attempting to flee. In the centre of the second slab are represented two satyrs carrying off a huge crater which they are holding high up in the air. Two other satyrs (of the hairy Silenus type) are shown trampling out grapes in large woven baskets. On the third slab is represented a Dionysiac panther, leaping over a horizontal thyrsus.

These well-preserved reliefs which once undoubtedly formed the sculptured decoration of some Dionysiac base or large altar (to which probably some of the architectural members also belonged) are important chiefly as new examples from Athens of the so-called Neo-Attic art; but even though they are works of a late period—the time of Hadrian rather than Augustus—they are not lacking in beauty and life.

Mr. Rhomaios, head of the Department of Antiquities, spent three weeks in April at Thermon working chiefly on the temple belonging to the Geometric layer. This was found to have not only the north end slightly curved but the long sides as well. [1] The south end, with the entrance, was straight. These slight curves are curious and show at least the influence of the elliptical structures so common in the pre-Geometric period at Thermon. It is well known, furthermore, that the peristyle of this Geometric temple had an apsidal plan.

From August 20th to October 20th Mr. Rhomaios spent in Mykonos, Delos and Rheneia studying the important find made by the late Mr. Stavropoulos in 1899. The brief published reports of the discoverer were quite inadequate when one considers the importance of his finding of the burial "caskets" of the Delians removed from the island in 425 B.C. (cf. Thuc. I. 8). Thanks to the patient efforts of Mr. Pippas, the present ephor, the numerous notes found among the belongings of Mr. Stavropoulos, and his shorthand annotations labelling the

[1] In a length of 7.30 m. on the north end the perpendicular from the middle of the chord is 0.30 m., while the long sides have a length of 21.40 m., and the perpendicular is 0.40 m.

vases and the various graves have been deciphered, so that by comparing them with the vases in the Museum at Mykonos much new light is thrown on the important question: which vases belong to the precinct of the "purification," and which were found outside it and must consequently be attributed to graves later than 425 B.C.

On the island of Rheneia, south of the "precinct of the purification," Mr. Rhomaios carried out a small excavation with laborers kindly loaned by Mr. Pippas, who was continuing his investigation of the Herakleion. Seven graves were found, all later than 425 B.C. Since burials clearly took place around the precinct after the year of the purification and during the Hellenistic and Roman periods while the area of the common tomb was never molested throughout antiquity, we have a certain chronological "terminus ante quem" for the latest finds from the precinct itself.

Near the Herakleion, Mr. Pippas excavated some graves in the place where Mr. Stavropoulos found Geometric tombs and discovered in them iron sickles, similar to the fifty or more found in the "precinct of purification." It is probable that these sickles from the Delian tombs led the contemporaries of Thucydides to believe in the Carian tradition. But the recent excavations have shown how mistaken this interpretation was. In two graves dating from the end of the fifth century similar sickles were found. Some other explanation is therefore necessary for these peculiar objects. Perhaps they are prizes of dancers of Artemis, who was worshipped from early times in Delos and Rheneia, similar to those from the sanctuary of Artemis Orthia at Sparta.

Taking advantage of the exceptionally dry season of 1924 on account of which the lake of Stymphalus had withdrawn more than one hundred metres from the rock which bounds it on the west, Mr. Orlandos, in September, at the expense of the Archaeological Society, brought to light a considerable number of buildings, the majority of which had hitherto been covered by the alluvium of the lake. He found, among others, a tetrastyle, prostyle temple, 16.40 m. in length, 7.60 m. in width, of which only the foundations are preserved. The columns of the prostasis each had a separate base. In the cella is still preserved the base of the statue; behind the cella are two compartments which probably served as treasuries or depositories. The temple probably belongs to the Hellenistic period.

A little beyond the temple to the southwest were found two small sanctuaries in the form of a letter *pi* (interior is 0.84 m. by 1.20 m.). In one of them is preserved a well-worked base—probably of the cult image.

Still farther west Mr. Orlandos uncovered the foundations of a building, which, if it were situated differently, could on account of its plan be called a propylon.

Beside the propylon a fountain with four spouts was cleared and a flight of steps was discovered by which one descended to draw water. The spring has the shape of the letter *pi* also, 6.25 m. wide.

All the above-mentioned buildings lie between the city wall—of which the whole circuit may be traced, partly in the lake—and a great *plateia*, probably the ancient agora of Stymphalus. In the middle of this square, which is bounded on the north by a deep (8.00 m.) cutting in a long low hill, is a curious edifice consisting of a circular building (*tholos*) adjoining a narrow corridor. What the purpose of this building was has not yet been discovered.

The hill above the agora was also investigated and three temples were recognized, the westernmost of which is that mentioned by Frazer and H. v. Gaertringen.

Finally, in a small excavation on a low hill at a place called *Λάκκα τοῦ φίλιππα*, twenty minutes west of Stymphalus, was discovered the lower part of a circular

tomb (exterior diameter 18.45 m.) with interior partitions in the form of a cross, recalling the similar tombs in Macedonia and at Pergamon. The tomb had unfortunately been plundered; only the shattered larnax of a child was found. From the style of the exterior wall of the tomb it should date from Hellenistic times.

Besides the excavation of the classical remains the campaign included the study of the plan of the mediaeval church at the Stymphalian spring. The imposing ruins of this church had been identified as belonging to a Byzantine basilica. By the discovery of composite piers in the interior it was established however that the church is the work of the Frankish conquerors (ca. 1250 A.D.); since the plan as well as the architectural members (capitals, buttresses, etc.) is Gothic in style.

Excavations were undertaken at Eleusis this year by Mr. Kourouniotis, the Director of the National Museum, beginning at the south gate of the sanctuary where the method of construction of the gateway was examined by means of a trench sunk to virgin soil. This showed that the foundations of the handsome south wall of the precinct, which dates from the fourth century, are interrupted at this point by an opening equal to the gateway in width. This opening was filled with a substructure of large stones, similar to the blocks of the wall, but much more carelessly and less strongly built. Slightly more than 1.00 m. above native rock is the original threshold contemporary with the wall and worked in the same careful, fine way as the whole south wall. In Roman times the ground level rose, the threshold was covered over and replaced by a new one in marble. The gateway was at the same time narrowed, new parastades being set in front of the original ones. This second gateway was again remodeled, perhaps in late Roman times; again new parastades were added, making the opening still narrower, and a new threshold was set at a level higher than its predecessor.

On the older parastades are clearly visible the traces of the fire which destroyed the gate and made a reconstruction necessary.

Opposite this gate (a few metres from the tower before it) there had been uncovered in 1920 two sides of a fine polygonal building, within which were found small rectangular structures built of unworked stone and filled with rather large vases, especially amphorae and small pithoi, set in order and containing ashes. Near these were found a few small pots, lekythoi and small skyphoi of the customary funerary type. These finds led to the belief that the small rectangular structures were burial precincts and the large polygonal building was conjectured to be the enclosure for these smaller precincts.

The campaign this year laid bare the whole exterior of the polygonal building and the greater part of its interior, and demonstrated that the small rectangular structures constituted a system of connected rooms forming a small house. The house consists of a large room on the north with three smaller rooms on the south with a common court in front. The wall and some of the pavement of the court are preserved. The doorways, thresholds and steps of the rooms are also preserved. The large north room offers no special interest. The small room adjoining it is divided into two parts: one half with a slightly lower floor was filled with vases containing ashes, the other half formed a paved passage leading to a circular pit. The two small rooms adjoining on the south were also filled with pots holding ashes. The date of the house may be determined by the pottery which is all Proto-Corinthian or late Geometric.

The great polygonal structure encloses this house, but neither its date nor its purpose could be determined. It may have been built to protect the remains of the small archaic house which, to judge from the vases containing ashes and the pit, probably had a sacral purpose. Before this polygonal enclosure was built, a smaller one of poros had been erected in the ruins of the house, probably before the

fifth century, because black-figured vases and other sixth-century objects were found above it. But this evidence is not absolutely convincing since into this region below the south wall of the precinct, it appears that earth and other things were sometimes thrown down from the precinct.

The most important find of this season's campaign was made here: a small statue of a woman, approaching the end of the archaic period in style, and taking its place between the maidens of the Acropolis and the figures from the gables at Olympia. It represents a young woman wearing the Doric peplos and a high crown. She is moving rapidly to the left, turning her head to the right as though pursued from this direction or looking at some action which causes her flight. It is probably Persephone fleeing from Pluto; or one of her companions flying in terror before the abduction of Persephone. The figure may possibly have belonged to the gable of some archaic building of small dimensions.

In the Second Archaeological District an attempt was made by Mr. Pappadakis, the Ephor, to find the sanctuary and altar of Zeus Kenaios mentioned in tradition as closely connected with the Pyre of Heracles on Mt. Oeta. The results were mainly negative. Instead of the sanctuary hoped for, a rectangular enclosure (measuring ca. 50.00 m. on a side) was discovered, surrounded by an ancient wall more than 2.00 m. thick with three towers at the corners, resting on foundations of poros. A temple and altar were sought for in vain within the enclosure. It is possible that the temple stood outside these walls, but it may have been completely destroyed during the building of the Byzantine and Turkish houses scattered over all this part of Mt. Kenaion. The small finds were of no great consequence (potsherds of the fourth century and later).

The rest of the small finds, especially bronze, from the earlier excavations of the Pyre of Heracles, have been cleaned and placed on exhibition in the Museum at Thebes.

New accessions in the Tanagra (Skimatari) Museum are two marble table supports of Roman style brought to light during ploughing within the walls of the ancient city. One bears in relief a youth (broken below the thighs), holding in his hands before his breast a bunch of grapes, a type of Silvanus perhaps; the other a Gorgoneia.

From the Peloponnesus is reported the discovery, at Tiryns, in a field west of the acropolis, of a tomb (1.23 m. x 0.47 m. and 0.45 m. deep), built of unworked stones and covered by a slab. Within the tomb were found seven Geometric pots and some pieces of bronze. These objects have been placed in the museum at Nauplia.

From Thessaly Mr. Arvanitopoulos reports the discovery at Pherae, during the continuation of the excavation of the sanctuary of Zeus Thaulios (at the expense of the Greek Archaeological Society), of five large and five small inscribed portions of marble stelae—one a dedication to Ennodia, a divinity known elsewhere in Thessaly.

The Ephor found also architectural remains of two temples: one, of about 400 B.C., and a second, dating from approximately 600 B.C.; including portions of the echinus of poros capitals with carved ornament and fragments of cornice with delicately cut spiral decoration. A fragment of a primitive Doric capital dating

from about 750 B.C. was also found. Foundations of five buildings were uncovered close to the eastern side of the temple. One or two of these foundations may be those of smaller or earlier temples; the rest apparently belong to altars or dedications. The finds from the temple are very rich and interesting, and it is hoped that the Archaeological Society may obtain sufficient funds to continue the excavations on a large scale.

Small trial excavations were made at Halos and elsewhere in the plain of Halmyros at the expense of the Ministry of Education. Contrary to expectations no Mycenaean remains were found at Halos, but ordinary Geometric remains in abundance. Mr. Arvanitopoulos believes that the site of the temple of Itonian Athena is not to be sought in the district of Halmyros, but in the neighborhood of Kierion (modern Sophades-Mataranga-Pyrgos).

Mr. Xanthoudides reports to the Archaeological Society the following results of his excavations in Crete in July, 1924:

The discovery some months ago at Pyrgos, of part of a gold diadem in a recess of the Early Minoan tomb excavated a few years ago (published in *'Αρχ. Δελτίον*, Vol. 4, 1918, p. 136), led to a further investigation to determine whether the tomb had originally extended farther into the cliff than had been supposed. The excavation showed that this was not the case, but about 50.00 m. farther east two simple earth burials were found in hollows among the rocks. The two skeletons had their heads toward the east and were probably originally in the contracted position. A few scanty sherds show that the graves belong to the Early Minoan period contemporary with the great tomb at Pyrgos. On the rocky hill of Pyrgos some thirty small artificial hollows (0.25 m. to 0.40 m. deep, 0.20 m. to 0.30 m. wide, and generally narrowing toward the bottom) were counted. Their purpose could not be determined, but they seem to belong to an Early Minoan settlement, since numerous potsherds scattered over the top indicate that the settlement to which the great tomb belonged may have stood here.

Just below the Minoan house at Nirou Chani and beyond the new carriage road where numerous Minoan potsherds appear, trial trenches were opened to see if any buildings exist between the house and the sea. These trenches showed that the whole deposit here is a refuse heap from the settlement; scanty traces of walls were found only at a depth of 3.00 m. This whole fill was full of Middle Minoan sherds while the great house, as stated in the publication ('Αρχ. 'Εφ., 1922, pp. 1 ff.), dates from Late Minoan I. Many of these sherds from the dump preserve their polychrome decoration. Of the shapes the commonest are Middle Minoan stemmed goblets and two-handled jars with bridged spout. Within this fill, which was probably formed during the grading and excavation for the great "Megaron", were found also two coarse clay lamps with single outlet, almost intact and of no little interest. They bear marks of considerable burning. One is of a rare type with a hollow foot. These lamps, too, are evidently of Middle Minoan date. A small animal figure was also found, representing with great naturalism a seated ram—probably broken off from some vase which it decorated. The white decoration on a black slip is well preserved.

Somewhat more than 500 m. west of the Minoan house at Nirou Chani, on the west bank of the Vathianos River at a point where fragments of larnakes suggested the existence of a cemetery, trenches were dug in search of tombs. These excavations showed that the cemetery had in fact been here, but had been almost completely washed out in the great flood of 1897. The lower part of a small but important tomb was, however, found, low down in the bed of the stream near its western bank. This grave contained some remains of the skeleton—part of the skull and the lower part of the legs—of a youth or a girl. The tomb was 1.20 m.

long. In the tomb were two small squat stirrup vases of Late Minoan II style. They are decorated with zones and simple curvilinear patterns in brown or red on a pale white ground. More important are the following small finds from the tomb:

1. An ornament in the form of a small bull's head of bright red sardonyx. All the details are rendered naturalistically and with great skill, and it is a little masterpiece of workmanship.

2. Two small male figures of ivory, unfortunately damaged. The head and legs of one are preserved, of the other the upper half of the body to the hips (without the arms) and the lower half from the hips to the knees. The figures must have been about 0.05 m. high. Here, too, the details are rendered with wonderful delicacy and naturalism. Perhaps these small figures formed the heads of pins of ivory, of which a good many fragments were found.

3. A large lentoid gem of sardonyx bearing a representation of two wild goats standing back to back, turning their heads and butting, with a kid standing upright on its hind legs between them. It is a stone of extraordinary beauty and artistic worth.

4. A lentoid gem of crystal on which is represented a wild goat.

5. Two small lentoid gems of greenish blue jasper—on one a four-footed animal is represented.

6. Two spherical beads of amber (decayed), a large almond-shaped bead of sard, and a small silver ring much oxidized.

7. A bronze knife preserving a piece of the bone handle which was fastened by two rivets.

It is strange that such beautiful and elegant objects were found in such a small tomb. It makes the loss of the other tombs, which probably contained similar objects, all the more deplorable.

One kilometre west of Nirou Chani, at a point called St. Theodore, there is a narrow peninsula which runs out to a small island. The peninsula shelters a small harbor where boats anchor in stormy weather. Along the beach of the harbor, covered to-day by sand, appear the ruins of a settlement, partly in the water. When the weather is calm one may see the walls under water—one supporting two stone column bases. Some years ago one of the houses on the shore was cleared (now it is again covered by sand), and from the pottery it was established that the building is contemporary with the great house at Nirou Chani. Mr. Xanthoudides hopes to lay bare further houses of this settlement at the first opportunity.

E. P. B.

American School
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ABBREVIATIONS

Abh.: Abhandlungen. *Allg. Ztg.:* Münchener Allgemeine Zeitung. *Alt. Or.:* Der alte Orient. *Am. Anthr.:* American Anthropologist. *Am. Archit.:* American Architect. *A.J.A.:* American Journal of Archaeology. *A. J. Num.:* American Journal of Numismatics. *A. J. Sem. Lang.:* American Journal of Semitic Languages and Literature. *Ami d. Mon.:* Ami des Monuments. *Ant. Denk.:* Antike Denkmäler. *Ann. Arch. Anth.:* Annals of Archaeology and Anthropology. *Ann. Scuol. It. At.:* Annuario della r. Scuola Archeologica di Atene e delle Missioni Italiane in Oriente. *Ant. J.:* The Antiquaries Journal. *Arch. Anz.:* Archäologischer Anzeiger. Ἀρχ. Δελτ.: Ἀρχαιολογικὸν Δελτίον. Ἀρχ. Ἐφ.: Ἀρχαιολογικὴ Ἐφημερίς. *Arch. Rec.:* Architectural Record. *Arch. Rel.:* Archiv für Religionswissenschaft. *Arch. Miss.:* Archives de Missions Scientifiques et Littéraires. *Arch. Stor. Art.:* Archivio Storico dell' Arte. *Athen.:* Athenaeum (of London). *Ath. Mitt.:* Mitteilungen d. k. d. Archäol. Instituts, Athen. Abt.

Beitr. Assyr.: Beiträge zur Assyriologie. *Ber. Kunsts.:* Amtliche Berichte aus den Königlichen Kunstsammlungen. *Berl. Akad.:* Preussische Akademie der Wissenschaften zu Berlin. *Berl. Phil. W.:* Berliner Philologische Wochenschrift. *Bibl. Stud.:* Biblische Studien. *Bibl. World:* The Biblical World. *B. Ac. Hist.:* Boletin de la real Academia de la Historia. *B. Soc. Esp.:* Boletin de la Sociedad Española de Excursiones. *Boll. Arte:* Bollettino d'Arte. *Boll. Num.:* Bollettino Italiano di Numismatica. *Bonn. Jb.:* Bonner Jahrbücher: Jahrbücher des Vereins von Altertumsfreunden im Rheinlande. *B.A.I. Chicago:* Bulletin of the Art Institute of Chicago. *B.A.S.O.R.:* Bulletin of the American Schools of Oriental Research. *B.S.A.:* Annual of the British School at Athens. *B.S.R.:* Papers of the British School at Rome. *B. Arch. C. T.:* Bulletin Archéologique du Comité des Travaux hist. et scient. *B. Arch. M.:* Bulletin Archéol. du Ministère. *B.C.H.:* Bulletin de Correspondance Hellénique. *B. Cleve. Mus.:* Bulletin of the Cleveland Museum of Art. *B. Inst. Gen.:* Bulletin de l'Institut National Genevois. *B. Inst. Ég.:* Bulletin de l'Institut Égyptien (Cairo). *B. Metr. Mus.:* Bulletin of the Metropolitan Museum of Art, New York. *B. Mon.:* Bulletin Monumental. *B. Mus. Brux.:* Bulletin des Musées Royaux des arts décoratifs et industriels à Bruxelles. *B. Mus. F. A.:* Museum of Fine Arts Bulletin, Boston. *B. N. Y. Hist. Soc.:* New York Historical Society Quarterly Bulletin. *B. Num.:* Bulletin de Numismatique. *B. R. I. Des.:* Bulletin of the Rhode Island School of Design. *B. Soc. Anth.:* Bulletin de la Société d'Anthropologie de Paris. *B. Soc. Midi Fr.:* Bulletin de la Société Archéologique du Midi de la France. *B. Com. Rom.:* Bullettino d. Commissione Archeologica Comunale di Roma. *B. Arch. Crist.:* Bullettino di Archeologia Cristiana. *B. Pal. It.:* Bullettino di Paletnologia Italiana. *Burl. Mag.:* Burlington Magazine. *B. Soc. Ant. Fr.:* Bulletin de la Société des Antiquaires de France. *Byz. Z.:* Byzantinische Zeitschrift.

Chron. Arts: Chronique des Arts. *Cl. Phil.:* Classical Philology. *Cl. R.:* Classical Review. *C. R. Acad. Insc.:* Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres. *C.I.A.:* Corpus Inscriptionum Atticarum. *C.I.G.:* Corpus Inscriptionum Graecarum. *C.I.L.:* Corpus Inscriptionum Latinarum. *C.I.S.:* Corpus Inscriptionum Semiticarum. *Cron. B. A.:* Cronaca delle Belle Arti.

Eph. Ep.: Ephemeris Epigraphica. *Eph. Sem. Ep.:* Ephemeris für Semitische Epigraphik. *Exp. Times:* The Expository Times.

Gaz. B.-A.: Gazette des Beaux-Arts. *G.D.I.:* Sammlung der griechischen Dialekt-Inschriften.

Ind. Notes: Indian Notes and Monographs. *I.G.:* Inscriptiones Graecae (for contents and numbering of volumes, cf. *A.J.A. IX*, 1905, pp. 96–97). *I.G.A.:* Inscriptiones Graecae Antiquissimae, ed. Roehl. *I. G. Arg.:* Inscriptiones Graecae Argolidis. *I. G. Ins.:* Inscriptiones Graecarum Insularum. *I. G. Sept.:* Inscriptiones Graeciae Septentrionalis. *I. G. Sic. It.:* Inscriptiones Graecae Siciliae et Italiae.

Jb. Arch. I.: Jahrbuch d. k. d. Archäol. Instituts. *Jb. Kl. Alt.:* Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik. *Jb. Kunsth. Samm.:* Jahrbuch der Kunsthistorischen Sammlungen des allerhöchsten Kaiserhauses. *Jb. Phil. Päd.:* Neue Jahrbücher für Philologie und Pädagogik (Fleckeisen's Jahrbücher). *Jb. Preuss. Kunsts.:* Jahrbuch d. Preuss. Kunstsammlungen. *Jh. Oest. Arch. I.:* Jahreshefte des oesterreichischen Archäologischen Instituts. *J. Asiat.:* Journal Asiatique. *J.A.O.S.:* Journal of the American Oriental Society. *J. B. Archaeol.:* Journal of the British Archaeological Association. *J. B. Archit.:* Journal of the Royal Institute of British Architects. *J. Bibl. Lit.:* Journal of Biblical Literature. *J.E.A.:* Journal of Egyptian Archaeology. *J.H.S.:* Journal of Hellenic Studies. *J. Int. Arch. Num.:* Διέθνης

Ἐφημερὶς τῆς νομισματικῆς ἀρχαιολογίας, Journal international d'archéologie numismatique (Athens). *J.R.S.:* Journal of Roman Studies.

Kb. Gesammtver.: Korrespondenzblatt des Gesammtvereins der deutschen Geschichts- und Altertumsvereins. *Kunstchr.:* Kunstchronik.

Mb. Num. Ges. Wien.: Monatsblatt der Numismatischen Gesellschaft in Wien. *Mh. f. Kunstw.:* Monatshefte für Kunstwissenschaft. *Mél. Arch. Hist.:* Mélanges d' Archéologie et d'Histoire (of French School in Rome). *Mél. Fac. Or.:* Mélanges de la Faculté Orientale, Beirut. *M. Inst. Gen.:* Mémoires de l'Institut Genevois. *M. Acc. Modena:* Memoire della Regia Accademia di scienze, lettere ed arti in Modena. *M. Am. Acad. Rome:* Memoirs of the American Academy in Rome. *M. Soc. Ant. Fr.:* Mémoires de la Société des Antiquaires de France. *Mitt. Anth. Ges.:* Mitteilungen der anthropologischen Gesellschaft in Wien. *Mitt. C.-Comm.:* Mitteilungen der königlich-kaiserlichen Central-Commission für Erforschung und Erhaltung der Kunst- und historischen Denkmale. *Mitt. Or. Ges.:* Mitteilungen der deutschen Orient-Gesellschaft. *Mitt. Pal. V.:* Mitteilungen und Nachrichten des deutschen Pälestina Vereins. *Mitt. Vorderas. Ges.:* Mitteilungen der vorderasiatischen Gesellschaft. *Mon. Ant.:* Monumenti Antichi (of Accad. d. Lincei). *Mon. Piot:* Monuments et Mémoires pub. par l'Acad. des Inscriptions, etc. (Fondation Piot.) *Mün. Akad.:* Königlich Bayerische Akademie der Wissenschaften, München. *Mün. Jb. Bild. K.:* Münchner Jahrbuch der bildenden Kunst. *Mus. J.:* The Museum Journal of the University of Pennsylvania.

N.D.Alt.: Nachrichten über deutsche Altertumskunde. *Not. Arch.:* Notiziario Archeologico. *Not. Scav.:* Notizie degli Scavi di Antichitá. *Num. Chron.:* Numismatic Chronicle. *Num. Notes:* Numismatic Notes and Monographs. *Num. Z.:* Numismatische Zeitschrift. *N. Arch. Ven.:* Nuovo Archivio Veneto. *N. Bull. Arch. Crist.:* Nuovo Bullettino di Archeologia cristiana.

Or. Lit.: Orientalistische Literaturzeitung. *Or. Lux:* Ex Oriente Lux.

Pal. Ex. Fund: Quarterly Statement of the Palestine Exploration Fund. *Πρακτικά:* Πρακτικά τῆς ἐν Ἀθήναις ἀρχαιολογικῆς ἑταιρείας. *Proc. Soc. Ant.:* Proceedings of the Society of Antiquaries.

Rass. d'Arte: Rassegna d'Arte. *R. Tr. Eg. Assyr.:* Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes. *Rend. Acc. Bologna:* Rendiconto delle sessioni della R. Accademia delle Scienze dell' Instituto di Bologna, classe di scienze morali. *Rend. Acc. Lincei:* Rendiconti d. r. Accademia dei Lincei. *Rep. f. K.:* Repertorium für Kunstwissenschaft. *R. Assoc. Barc.:* Revista de la Associacion artistico-arqueologico Barcelonesa. *R. Arch. Bibl. Mus.:* Revista di Archivos Bibliotecas, y Museos. *R. Arch.:* Revue Archéologique. *R. Art. Anc. Mod.:* Revue de l'Art ancien et moderne. *R. Art Chrét.:* Revue de l'Art Chrétien. *R. Belge Num.:* Revue Belge de Numismatique. *R. Bibl.:* Revue Biblique Internationale. *R. Ép.* Revue Épigraphique. *R. Ét. Anc.:* Revue des Études Anciennes. *R. Ét. Gr.:* Revue des Études Grecques. *R. Ét. J.:* Revue des Études Juives. *R. Hist. Rel.:* Revue de l'Histoire des Religions. *R. Num.:* Revue Numismatique. *R. Or. Lat.:* Revue de l'Orient Latin. *R. Sém.:* Revue Sémitique. *R. Suisse Num.:* Revue Suisse de Numismatique. *Rh. Mus.:* Rheinisches Museum für Philologie, Neue Folge. *R. Abruzz.:* Rivista Abruzzesa di Scienze, Lettere ed Arte. *R. Ital. Num.:* Rivista Italiana Numismatica. *R. Stor. Ant.:* Rivista di Storia Antica. *R. Stor. Calabr.:* Rivista Storica Calabrese. *R. Stor. Ital.:* Rivista Storica Italiana. *Röm.-Germ. Forsch.:* Bericht über die Fortschritte der Römisch-Germanischen Forschung. *Röm.-Germ. Kb.:* Römisch-Germanisches Korrespondenzblatt. *Röm. Mitt.:* Mitteilungen d. k. d. Archäol. Instituts, Röm. Abt. *Rom. Quart.:* Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte.

Sächs. Ges.: Sächsische Gesellschaft (Leipsic). *Sizb.:* Sitzungsberichte. *S. Bibl. Arch.:* Society of Biblical Archaeology, Proceedings.

W. kl. Phil.: Wochenschrift für klassische Philologie.

Z. D. Pal. V.: Zeitschrift des Deutschen Palästina Vereins. *Z. Aeg. Sp. Alt.:* Zeitschrift für Aegyptische Sprache und Altertumskunde. Z. *Alttest. Wiss.:* Zeitschrift für Alttestamentliche Wissenschaft. *Z. Assyr.:* Zeitschrift für Assyriologie. *Z. Bild. K.:* Zeitschrift für bildende Kunst. *Z. Ethn.:* Zeitschrift für Ethnologie. *Z. Morgenl.:* Wiener Zeitschrift für die Kunde des Morgenlands. *Z. Morgenl. Ges.:* Zeitschrift der deutschen Morgenländschen Gesellschaft. *Z. Mün. Alt.:* Zeitschrift des Münchener Alterthumsvereins. *Z. Num.:* Zeitschrift für Numismatik.

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THE FATES OF THE MADRID PUTEAL

PLATE III

THE Madrid Puteal is one of those monuments which are very well known but very seldom seen. It has been adequately described, though not adequately reproduced, by Robert von Schneider in his monograph,[1] and photographs of its relief-sculpture are included in Arndt-Amelung.[2] The three chief characters, Zeus on his throne, with scepter and thunderbolt, Athena in armour, moving rapidly to the right, and Hephaestus (or Prometheus) with double axe on his arm, moving to the left, have been more or less cordially accepted as versions of the central group of the east pediment of the Parthenon; while the remaining figures, three Fates with attributes in their hands, have been consistently discarded as irrelevant. Although Hauser[3] ventured the opinion that the Fates, like the other figures of the Puteal, might be Phidian, his remark remained unheeded or unapproved; and he himself recanted later.[4] Such stepmotherly treatment is undeserved. An unmistakable likeness to the Muses of the Mantinea Basis, and the accident of a faulty placing of the central group in the pediment (which left inadequate room for the Fates) were apparently responsible for the early slur upon their Phidian character. They have never since recovered their reputation.

The whole problem merits reëxamination, in order that all the figures of the Puteal may be given a proper hearing and judged on evidence rather than dismissed without it. Proper photographs are here much-needed documents; and these I have tried to supply.

I. THE FATES IN FIFTH CENTURY MYTHOLOGY[5]

We have no fifth century warrant for that familiar conception according to which Clotho spins the thread of life for the new-born, Lachesis draws out the thread, and Atropos shears it off. To be sure, there are spinning Norns, Κλῶθες, in Homer. In *Iliad* XX, 128 it is Aisa who thus spins the life thread; and in *Odyssey* VII, 197 it is Aisa and the Clothes. In *Iliad* XXIV, 209 Moira is the spinner; but the plural Μοῖραι occurs only in *Iliad* XXIV, 49. In verse 525 of the same book, and in several passages in the Odyssey, the gods are spinners of destiny. It is evident that the tradition is vague and the personalities still unsettled.

[1] *Die Geburt der Athena.*
[2] *Einzelaufnahmen antiker Skulpturen*, nos. 1724–9.
[3] *Neu-attische Reliefs*, p. 68.
[4] *Jh. Oest. Arch. I.*, 1903, pp. 79–107.
[5] I have based this section on a much more comprehensive study made at my request by Dr. Marjorie Milne of Bryn Mawr, to whom I owe my thanks.

On the François Vase are shown together *four* Moirai wholly undifferentiated by names or attributes. Weizsäcker[1] has suggested that these are Themis or Eileithyia with the three Fates; but it is more probable that all four are merely Fates, vague in number and void of attribute.

FIGURE 1. MADRID PUTEAL: CLOTHO

Hesiod already seems to know these Fates by name. In his *Theogony* they are daughters of Night in verse 217, but daughters of Zeus and Themis in verse 904. In both passages their names are given, Clotho, Lachesis, and Atropos; but since verses 218–9 are almost identical with 905–6 and are omitted in the former position

[1] Roscher, *Lexikon d. gr. u. röm. Mythologie, s.v.* Moira.

in Stobaeus *Ecl.* I, 3, 38 and both passages could be dropped without injury to the sense, we must reckon with the possibility that these names are a later interpolation. Nor are we on firmer ground with the pseudo-Hesiodic *Shield of Herakles* 258 ff., where Atropos is called the smallest and oldest of the Moirai,—a unique character-

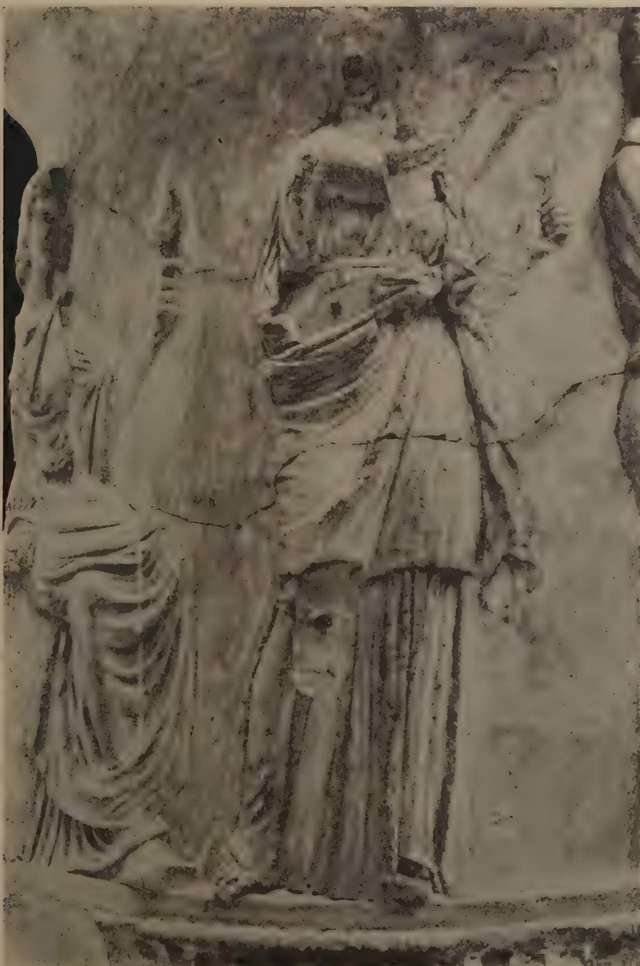


FIGURE 2. MADRID PUTEAL: LACHESIS

ization. Suspicion of these passages is based on the observation that, though the Moirai are triple in Aeschylus [1] and in the pre-Periclean lyric fragment in Stobaeus, *Ecl.* I, 5, 10–12, the collocation of the three names so familiar to us occurs in no other passage claiming earlier date than Plato. There, in *Republic* X, 617C, it occurs in splendid setting, in the famous Myth of Er.

[1] *Prom. Vinct.* 516.

However, Clotho is certainly an old-established and familiar personage. In Pindar's *First Olympian Ode*, 26 it is she who takes Pelops out of the caldron. In the *Fifth Isthmian*, 17 she is named, "Clotho the lofty-throned," along with "sister Moirai," who are nameless.

FIGURE 3. MADRID PUTEAL: "AISA" AND HEPHAESTUS

As for Lachesis, in Pindar's *Seventh Olympian*, 64 ff. she is bidden by Helios to preside over the lot of Rhodes; but there is no indication that she is here one of three Fates. Rather, she seems to be an independent divinity, like Tyche. So Isyllus of Epidaurus[1] makes her a μαῖα ἀγανά presiding independently with the Moirai at the

[1] D16; p. 13 of Wilamowitz' edition.

birth of Asklepios. In a fragment published by Grenfell and Hunt [1] and attributed by these editors to Pindar on account of numerous Pindaric echoes and resemblances, Eileithyia and Lachesis raise cries of joy at the birth of Apollo and Artemis. And inasmuch as Pindar elsewhere associates Eileithyia with the Moirai, he may have regarded Lachesis here as one of the Fates. But whether she is yet thought of as a Moira or no, clearly she belongs at the birth of gods.

There is an early fifth century lyric fragment in Stobaeus which has been plausibly attributed by Wilamowitz [2] to Simonides; and therein are named Clotho and Lachesis and with them as a third, not Atropos, but a vaguer and generic Aisa. Unless we accept as genuine the previously cited Hesiodic passages, it would seem that Plato was responsible for Atropos and that he invented her name, her character, and her activities for his legend of reincarnation.

In brief, the vague and shadowy Moirai of earlier days have, by the time of the Parthenon, crystallized into three, of whom one is certainly Clotho, and a second is probably Lachesis; but the third is still unnamed or uncertain, and may best be called, not Atropos, but Aisa.

As for their functions, Moira in Homer is usually concerned with death; and this conception persists throughout Greek literature, for the most part in a merely conventional form as in the epic and elegiac phrase *μοῖρα θανάτου*. In late sepulchral epigrams the idea is very common, and here Moira or the Moirai are often vividly personified. In the fifth century we find the Moirai concerned in the death of Alcestis [3] and of Meleager.[4] But the chief province of the Moirai at this time was patently that of marriages [5] and births.

In the opening line of his *Seventh Nemean Ode*, Pindar calls Eileithyia the *πάρεδρος Μοιρᾶν βαθυφρόνων* and in his *Sixth Olympian*, 41, he tells how Apollo sent Eileithyia and the Moirai to Evadne for the birth of Iamus. By Euripides the Moirai are called *λόχιαι θεαί*.[6] In Plato's *Symposium*, 206D, the wise Diotima asserts that the Moirai and Eileithyia preside over birth.

That they exercised this function for gods as well as for mortals is indicated by a passage in Euripides' *Bacchae*, 95 ff., where Zeus who has hidden Dionysus in his thigh *ἔτεκεν δ' ἁνίκα Μοῖραι τέλεσαν ταυρόκερων θεόν*. And we have already seen how Lachesis cried her joy at the birth of Apollo and Artemis, and how she and the Moirai presided when Asklepios was born. It is therefore

[1] Oxyrrhynchus Papyri XV, 1792.
[2] *Isyllos von Epidauros*, p. 16, n. 2.
[3] Aesch., *Eum.*, 724 ff.; Eur., *Alc.*, 10 and 33.
[4] Bacchyl., V, 143.
[5] Pind., frg. 30; Aristoph., *Av.*, 1731 ff.; Aesch., *Eum.*, 957 ff.; Pollux, III, 38; the François Vase; Catullus, LXIV, 305 ff., probably based on a Greek original. Cf. also Pind., P. IV, 145.
[6] *I.T.*, 206. This rests on an emendation, but on a very probable one.

thoroughly right and fitting that they should attend on the birth of the goddess Athena in the east pediment of the Parthenon.

Now, Zeus among all the Olympians is the god with whom the Moirai are most frequently associated. In our Simonides fragment, they sit closest to his throne. Above the head of his image at Megara (the work of Theocosmus, with which Phidias is said to have been associated) were the Fates and the Hours.[1] One of the epithets of Zeus is Μοιραγέτης;[2] and Zeus Moiragetes was apparently connected with the cult of Athena Polias at Athens, as Furtwängler pointed out.[3]

But the Moirai are also connected with Demeter and Persephone. According to a Phigalean legend,[4] they were sent by Zeus to the mourning Demeter and persuaded her to put aside her grief and anger. In Orphic Hymn, XLIII, 7 they and the Graces in dances lead Persephone to the light. On the Hyacinthus altar they were represented along with the Horai and next to Demeter, Cora, and Pluto.[5] Their temple at Corinth seems to have been close to that of Demeter and Cora.[6] In the stoa leading to the temple of Despoina at Lycosoura were reliefs of the Moirai and Zeus Moiragetes.[7] A connection with the Eleusinian Mysteries is possibly contained in the chorus of Mystai in Aristophanes' *Frogs*, 449ff:

τὸν ἡμέτερον τρόπον τὸν καλλιχορώτατον παίζοντες ὃν ὄλβιαι Μοῖραι ξυνάγουσιν.

What, then, can we imagine more appropriate for the Fates than to attend a divine birth, by appearing along with their traditional comrade Eileithyia between Zeus, their Leader, and the Mystery gods, who (as is clear to most present-day archaeologists) are the divinities seated in the left wing of the Parthenon east pediment? Enough has been said, I think, to prove the appropriateness of their presence here.

And now, if we ask ourselves under what guise a Phidian sculptor would have represented these Moirai, our answer can only be that he must have made of them three women, identified by accessory symbols indicative of their names:

Clotho, then, must be a spinner, and for her the sculptor would have used the spinning maiden type, already in use on grave reliefs.[8] Lachesis must be identified by λάχη or lots; and the third Fate, if

[1] Paus. I, 40, 4.
[2] Paus. VIII, 37, 1; X, 24, 4 (Zeus Moiragetes represented with the Moirai); V, 15, 5 (altar to Zeus Moiragetes near that of the Moirai at Olympia).
[3] *Meisterwerke*, p. 246, with regard to the inscription *C.I.A.* I, 93, line 12.
[4] Paus., VIII, 42, 3.
[5] *Ibid.*, III, 19, 3.
[6] *Ib.*, II, 4, 7.
[7] *Ib.*, VIII, 37, 1.
[8] See below, p. 126.

she be Aisa, should likewise be a bestower of lot or destiny. Were she Atropos, however, it would be difficult to suggest an appropriate and logical symbol; but in any case this would *not* be a pair of shears.

And with all this the figures on the Madrid Puteal are in complete agreement.

The first of them (Fig. 1) is a seated spinner. Her raised right hand holds a distaff; and though she has no spindle in her left, this is an omission of the copyist, for the Tegel version[1] shows the spindle clearly, and the pose of the hand is not otherwise intelligible.

The second Fate (Fig. 2) holds a curious object with triple stem and blade. The interpretation in favor today explains this as a bundle of three lots of unequal shape or length (like the three straws which we still use today for such a purpose) and suggests that the Fate is drawing from these with averted gaze.

The third Fate (Fig. 3) carried in her hands some object now indistinguishable, as to which it is difficult to make a concrete suggestion. A pyxis would fit the space and the position of the hands. Perhaps, then, it is an urn of pebbles, to indicate the chance or lot; and in that case we should speak of Aisa rather than Atropos. Or perhaps it is a prophetic scroll. But whatever the lost attribute may have been, there is no indication inconsistent with what we have stated as the fifth century conception of the Fates or with the representational methods of fifth century sculpture. So far, we have seen no reason to reject the figures of the Madrid Puteal.

II. Stylistic Criteria

It has been very generally asserted[2] that the Fates of the Puteal were taken from fourth century prototypes, that they closely resemble the Muses of the Mantinea Basis, and that they are therefore un-Phidian and post-Parthenon in their derivation.

On Figure 4 are collected three very close stylistic parallels for Aisa: all are fragments from among those ascribed to the Parthenon pediments and published as such in the British Museum publication, *The Sculptures of the Parthenon*.[3] The fragment at the left is described as a "piece of drapery which must have hung free, apparently from the shoulder and outstretched right arm."[4] It belongs to a figure about 9 feet in height and accordingly is of the same scale as the presumed pedimental original of Aisa. As on the corresponding shoulder-drapery of the Puteal Fate, flat taenia-like ridges are separated by equally wide, shallow furrows in parallel and rather monotonous arrangement, crossed abruptly by a slanting fold.

[1] Hauser, in *Jh. Oest. Arch. I.*, VI (1903), pp. 98–9.

[2] Most succinctly by Amelung, *die Basis des Praxiteles aus Mantinea*, pp. 13–15. I have replied in this article to all of his objections.

[3] Hereafter referred to as *Sc. P.*

[4] *Sc. P.* to Pl. 13, 7.

The second fragment resembles the himation of Aisa as it is rendered between right arm and thigh, with sharply rolled ridges converging in a fan of broad shallow flutings. The smallest fragment is to be compared with the drapery of Aisa at the calf, just above the rolled edge of himation. Further, there is the famous de Laborde head,[1] which, except for a slight difference in scale,[2] might almost be the original from which Aisa's was copied.

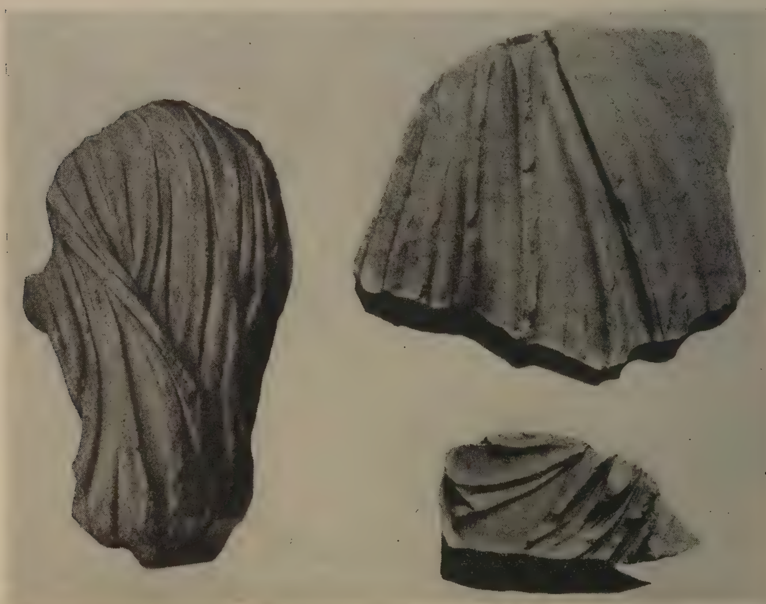


FIGURE 4. THREE FRAGMENTS FROM THE PARTHENON PEDIMENTS (From *Sculptures of the Parthenon*, Pl. 13, 7; 14c, 114 and 126.)

In the face of such resemblances it cannot be maintained that the style of the third Fate, at any rate, is not that of the Parthenon pediments. Especially important are the long-drawn parallel drapery lines, so coherent and consistent, not interrupted and episodic like those of the Mantinea Basis or the Tanagra Figurine style. This uniformity and continuity of line, so much closer to the old schematic formulae, is, in last analysis, the basic distinction between the fifth century drapery manner, whether of the Parthenon or the Erechtheum or the Nike Balustrade, and the fourth century manner so well illustrated on the Sarcophagus of the Mourning Women in Constantinople. The Mantinea Basis patently belongs with the latter, the Fates of the Madrid Puteal just as certainly with the former.

[1] Brunn-Bruckmann, pl. 362.
[2] The de Laborde head belongs to a figure about $8\frac{1}{3}$ feet in total height.

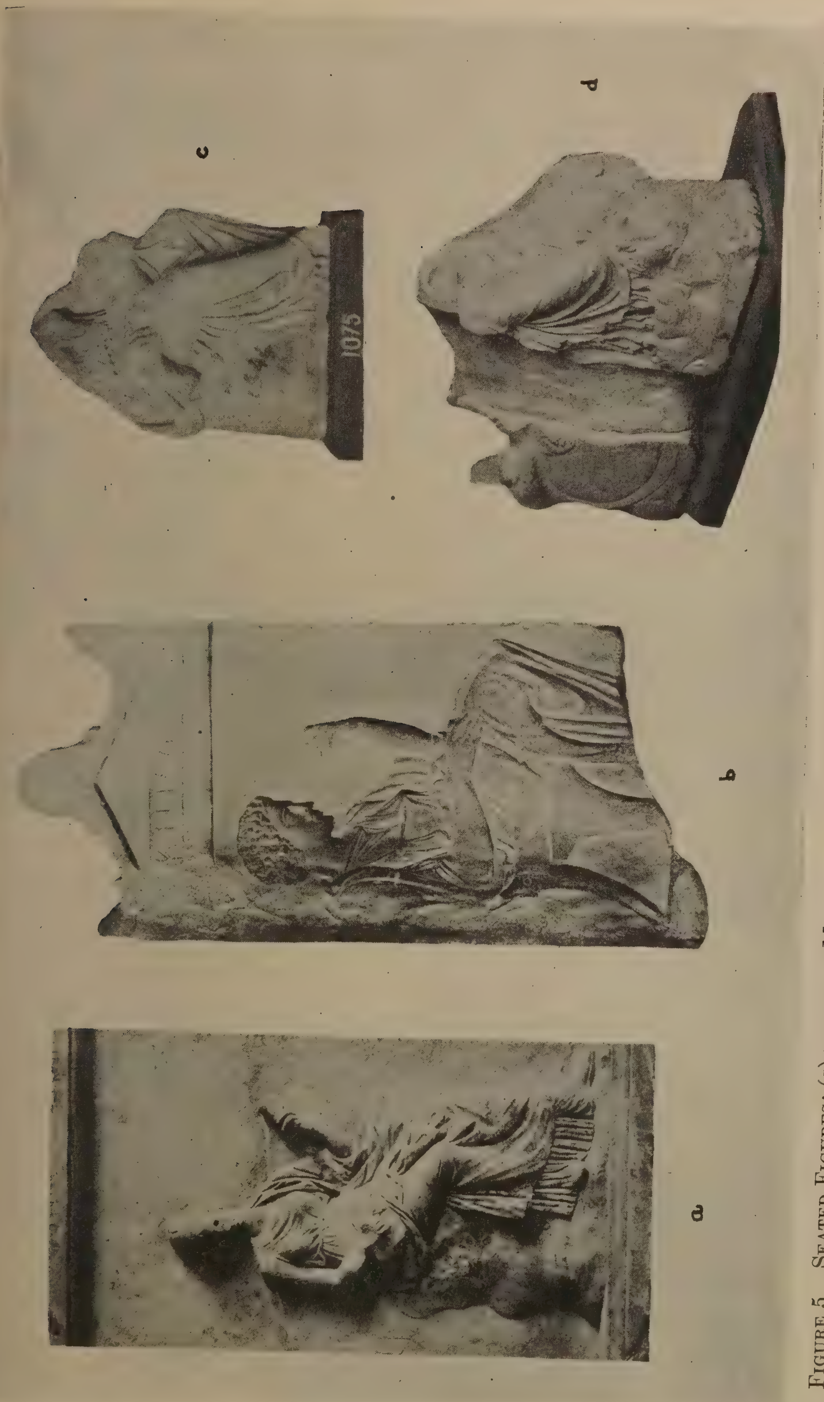


Figure 5. Seated Figures: (*a*) from the Mantinea Basis, (*b*) the Grave Stele of Mynno, (*c*) from the Erechtheum Frieze, (*d*) from the Nike Balustrade

Clotho's Parthenon ancestry is equally secure. The theme of the spinning maiden is at least as old as the sixth century, since it occurs on an archaic stele from Tyrnavo,[1] and is attested for the fifth century repertory by the grave relief of Mynno in Berlin[2] (Fig. 5 b). The pose of the draped woman upon a rocky throne occurs in Carrey's drawing of the Parthenon west pediment; and remnants of two draped women so seated are among the surviving fragments.[3] The drapery lines between Clotho's knees and ankles are a coherent system of catenary loops, whose axis is formed by the transparent indication of right knee and shin. If this be compared with the coarser but similar treatment on the Erechtheum frieze[4] (Fig. 5 c) and the stylistically more advanced (because freer and more elaborate) version on the Athena of the Nike Balustrade[5] (Fig. 5 d), it will be apparent that Clotho belongs with the former of these. Nor are the Demeter and Cora of the east pediment essentially different in drapery style. The only suspicious element in Clotho is the failure of the folds above the knees to model the thighs. Herein alone the copyist may be wide of his style. Yet very similar drapery forms are used on a seated figure on the east frieze of the Nike Apteros temple,[6] more or less contemporary with the Parthenon. To be sure, the head of Clotho has been cited in counter-evidence: it is Praxitelean, it is like the Eubouleus.[7] But the wavy lines radiating from the crown are schematically exact and regular; and copious locks over forehead and ears are scarcely a novelty in a century that produced the Barberini Apollo and the large-featured, heavy-haired heads of the Parthenon frieze. More specifically, the V-shaped folds at the neck and between the breasts, the fan of converging folds over the left arm, the pose of the raised hand and position of its fingers, the little crumple of drapery tucked under at the other hand,[8] are all in entire agreement with a Parthenon attribution.

Finally, there is Lachesis (Fig. 2), stylistically the most frequently and most openly accused of the three. She wears a chiton, girt high beneath the breast, and over this an himation which is turned down at the waist to form a panel-like overfold reaching nearly to the knee. The himation is crumpled over the hip and pinioned by the left elbow. (What appears to be a knot at this point is actually a projecting mass of irregular folds.) This manner of wearing the himation need not give the least offense to the modern critic. Many

[1] *B.C.H.*, 1888, Pl. XVI; *Ath. Mitt.*, 1890, Pl. IV, 1.
[2] Hauser, *Neu-attische Reliefs*, p. 68.
[3] *Sc. P.*, pl. 13, nos. 12 and 13.
[4] Casson, *Cat. Acropolis Museum*, 1075; *Antike Denkmäler*, pl. 33, 23.
[5] E or 28; Casson, *op. cit.*, p. 172.
[6] C. Blümel, *Der Fries des Tempels der Athena Nike*, Pl. I, no. 13.
[7] Amelung, *op. cit.*, p. 15.
[8] For these details, in the order named, *cf.* the Athena of the west pediment, *Sc. P.*, pl. 10; the Demeter of the east pediment, *Sc. P.*, pl. 3; *Sc. P.*, pl. 14 A, no. 25; *Sc. P.*, pl. 13, no. 12, and Erechtheum frieze 1078 on p. 182 of Casson.

of the elders on the Parthenon frieze[1] keep their garment in place in much the same manner, as does also the mutilated Figure 31 of the east frieze, a woman bearing a cushion upon her head. The Hera Barberini in the Vatican, the Athena Velletri in the Louvre, the Hope Athena in Deepdene, the Cora Albani, and the Cora of the famous Eleusinian relief in the Athens National Museum, all wear an overturned himation which differs from that of Lachesis only in the more or less triangular shape of the hanging panel. This style is clearly traditional by the end of the fifth century, because it appears on the Hera of the well-known Athenian decree in honor of the Samians in 403 B.C. The Aphrodite of the tortoise, in Berlin,[2] so generally accepted as of east pediment style, wears her himation in similar arrangement with overfold reaching to her knees. This same "panel himation," rolled at the waist, occurs unmistakably on the central figure of the east frieze;[3] and the three goddesses of the right wing of the east pediment (whom we may now no longer call the Fates) have their himatia cast back to their knees. But an even more exact, and indeed a completely satisfactory, parallel exists in the Athena Campana of the Hermitage, illustrated by Amelung in his monograph on the Mantinea Basis[4] and there correctly characterized by the remark, "der Stil dieser Figur gehört indessen unverkennbar dem fünften Jahrhundert an." I give for comparison the version in Munich (Fig. 6), which both Wolters[5] and Furtwängler[6] derive from a fifth century original. Furtwängler asserts, "die Schöpfung gehört zwar in die Zeit aber nicht in den Kreis des Phidias." Between this Athena and the Lachesis I cannot discover any measurable difference in bodily proportions, so that if the latter appear to be more slender, the effect must be due to the crossing arms and the higher girdle. As to this latter item, it is not exclusively a fourth century trait, since it occurs on the Erechtheum frieze[7] and perhaps on a fragment from the Parthenon pediments[8] showing a right breast with billowy drapery seemingly confined by a girdle just below it. The woman in Carrey's drawing of metope XIX[9] apparently wears a high-girt chiton with himation rolled on the right hip, and is an interesting combination of the drapery technique of Lachesis and of Aisa. As for other details, the position of the feet, the indication of the free-leg through the drapery, the arrangement of the heavy vertical folds, all agree closely with the Eirene of Cephisodotus, which is a very

[1] *E.g. Sc. P.*, pl. 32, nos. 18, 21, 22.
[2] Inv. Nr. 1459; Kekule, *Gr. Skulptur* (1907), pp. 104–5; Schrader, *Phidias*, figs. 57–8.
[3] *Sc. P.*, pl. 35, no. 33.
[4] *Op. cit.*, fig. 4.
[5] *Illustrierter Katalog der k. Glyptotek.* (1912), p. 26, no. 207; and pl. 20.
[6] *Beschreibung der Glyptotek.* (1900), pp. 176–8, no. 207.
[7] 2825 in Casson; *Ant. Denkm.*, II, 31, 4.
[8] *Sc. P.*, pl. 14 C, no. 137.
[9] *Sc. P.*, p. 33, fig. 57, the second woman.

conservative work adhering closely to the Phidian tradition.[1] And the whole pose of the figure with the rather straddling free-leg and the rigid unswaying torso is undeniably Phidian, except that the proportions are a trifle more slender. I have dwelt on the details of costume with such emphasis because the entire case against the

Figure 6. Munich Glyptotek, No. 207; Type of the Athena Campana

Madrid Fates is sometimes made to rest on this one element of this one figure. The comparison with the Mantinea Basis has been made without adequate photographs of the Madrid Puteal. Actually, in contrast with the second Muse of the Mantinea Basis or the small bronze Athena of the Florence Archaeological Museum,[2] Lachesis is distinguished by the fifth century drapery technique of continuous

[1] "Sie schliesst sich so unmittelbar an die Überlieferung der perikleischen Epoche an, dass man sich nur ungern entschliesst, die Gruppe erst um das Jahr 375 v. Chr. anzusetzen." Kekule, *die griechische Skulptur*, p. 233.

[2] Amelung, *op. cit.*, fig. 2.

and parallel lines which are not broken by crossing ridges or episodic irrelevancies. We may say of the Lachesis exactly what Amelung said of the contemporary Athena Campana, "An der Figur des fünften Jahrhunderts ziehen sich hier die Falten straff und gleichmässig von einer Seite zur anderen."[1] For the Muse of the Mantinea Basis, as Amelung remarks, this observation does not hold good, although in most other respects the two figures are essentially alike. In this there is no mystery. The Muse of the Mantinea Basis was derived from the pedimental prototype of Lachesis, being a reworking to conform to later drapery styles. In the same way, by a change of attribute and drapery style, Clotho was converted into the seated Muse with the lute (Fig. 5a) and with even fewer changes Aisa became the Muse with the open scroll. If we accept the Madrid Fates for the east pediment,[2] we need not hesitate to claim that at least three of the Mantinea Muses came from the Parthenon repertory. After all, what else was to be anticipated? Since completely new and original creations hardly exist in ancient sculpture, the Muses must have had their predecessors. The Puteal gives us what was hitherto missing,—the Mantinean Muses' Attic genealogy.

The doubts occasionally cast upon the remaining figures of the Puteal are equally unjustifiable. The Hephaestus is in much the same spirit as the "Hermes" of the west pediment in Carrey's drawing and the British Museum fragment. The swirl of drapery between the legs and the crumpled mass of it upon the arm recur in the Phigalean frieze,[3] which is largely a pastiche of fifth century Attic material; and a strikingly similar swirl occurs between the legs of a warrior on the Nike temple frieze.[4] The pose and bodily proportions agree strikingly with the Dioscuri of Monte Cavallo; whereby Dioscuri and Puteal confirm each other as Phidian.

The Zeus, too, is Phidian—*θαυμαστὸν ὅσον.* The evidence for leonine masses of hair, the *ἀμβρόσιαι χαῖται* of Homer, may best be found in such Phidian studies as that of Schrader on the Dresden Zeus and the bronze Zeus head in Vienna.[5] The drapery over the left arm is paralleled in a Parthenon pedimental fragment of colossal scale[6] and in the seated "Apollo" of the east frieze.[7] The broad torso, half-turned to show with full-front effectiveness, is a Parthe-

[1] *Op. cit.*, p. 19.

[2] I add one more stylistic indication: the drapery of the mid-fifth century Eleusinian relief discussed by Anti in *Ann. Scuol. It. At.*, vol. IV–V (pl. III) is somewhat less developed in style than that of Lachesis; while the familiar hydrophorus relief from the Ceramicus (*ca.* 400 B.C.) resembles Aisa, but shows the same drapery style at a considerably more developed phase. If we accept these two reliefs as *termini post quem* and *ante quem*, we shall have to date the Madrid Fates about the third quarter of the fifth century.

[3] *E.g.* on slabs 530, 536, 540.

[4] Blümel, *op. cit.*, Pl. IV, no. 4 (l.).

[5] *Jh. Oest. Arch. I.*, 1911, pp. 77–88.

[6] *Ath. Mitt.*, 1908, Pl. I, nos. 2 and 3; Casson, p. 72, no. 3295.

[7] *Sc. P.*, pl. 36, no. 39.

non device common to this same Apollo, to the Zeus and Hephaestus of the frieze, and, in another form, to the "Dionysus" of the east pediment. The "unkingly" position of the feet recurs in the gods of the frieze. The whole conception is echoed on the east frieze of the so-called Theseum,[1] in the seated god from whom an armed warrior rushes away like some more impetuous and male Athena, and again in the seated Zeus on the east frieze of the Nike temple.[2] I hold no brief for the details of the throne, except that the little sphinx rings true. .

The Athena is a study in ogival motion-lines comparable to the Eileithyia ("Iris") of the east pediment. She is copied again in the Epidaurus statuette published by Petersen[3] in company with another which equally clearly is a version of the Athena of the west pediment.

Our stylistic study is complete. Every clue which we have followed has led to the same end and brought us back to the Parthenon, whose east pediment (as we know from Pausanias) concerned this very subject of the Birth of Athena. It is time to put the Puteal Fates to the final test by attempting a pedimental restoration.

III. Material Evidence

If we commence with the so-called Iris (whom we shall now have to call Eileithyia hurrying away after accomplishing her task, while the Fates are beginning theirs) and, leaving her in the position in which Carrey drew her, fill the pedimental space by enlarging each of the Puteal figures to the necessary size, starting with Clotho and keeping the order and arrangement of the Puteal, we shall reach the result shown in Figure 7 and on Plate III A. But before we examine this result it is essential to discover how far it conforms to those architectural indications which Sauer has recorded in his publication of the pedimental floor-marks.[4] And in order to utilize this highly peculiar evidence it is essential first to study the *west* pediment in the light of Carrey's drawings wherein, beyond possible doubt, are shown statues which once occupied the blocks which Sauer illustrates.

It is obvious that Carrey's drawing must somehow harmonize with Sauer's floor-plan; but it is equally obvious, to anyone who has ever made the attempt, that Sauer's plan when reduced to Carrey's scale will not fit Carrey's statues. Repeated trials have led me to conclude that in making his drawing Carrey must have stood upon some sort of scaffolding, not extending along the whole west end but placed a little to the south of the pediment center, and drawn all

[1] Brunn-Bruckmann, 406.
[2] Blümel, *op. cit.*, Pl. I, no. 16.
[3] *Ath. Mitt.*, 1886, pp. 309–21.
[4] *Ath. Mitt.*, 1891, pl. III and pp. 59 ff.; *Antike Denkmäler*, I, 58 A–C.

FIGURE 7. THE FATES OF THE MADRID PUTEAL IN PEDIMENTAL FORM

the figures from that single station, with the result that the wing figures (especially to the north) are too small and are out of scale with the central figures.[1] If we re-draw Carrey by correcting in accord with this optical principle, we shall arrive at some such version as my sketch on Plate III B. (In addition, the horses of Athena must be forced into much smaller space than Carrey indicates: otherwise I do not see any way of working the problem.[2]) If such a rectified version be accepted, the floor-marks given by Sauer will be found to harmonize with the statuary[3] in accordance with the following principles:

(1) Broad iron bars at right angles to the tympanum support the weight of the horses through a stone prop (and perhaps also by a plinth carrying the hind hoofs).

(2) A slanting bar carries half the weight of Athena and half the weight of Poseidon by supporting one foot of each figure; the other foot of Poseidon is upheld by a second bar which is straight, not slanting.

(3) The outline of the plinths may usually be derived from the slightly raised setting-surfaces (indicated by a hatched line in my drawing); but the actual pose of any given figure may seldom be inferred from these lines.

(4) Hatched lines in the background near the tympanum are invariably unintelligible.

(5) Dowel-holes come close to hatched lines and confirm the belief that these are setting-marks.

(6) Pry-holes are not necessarily very close to the statues in their final position.

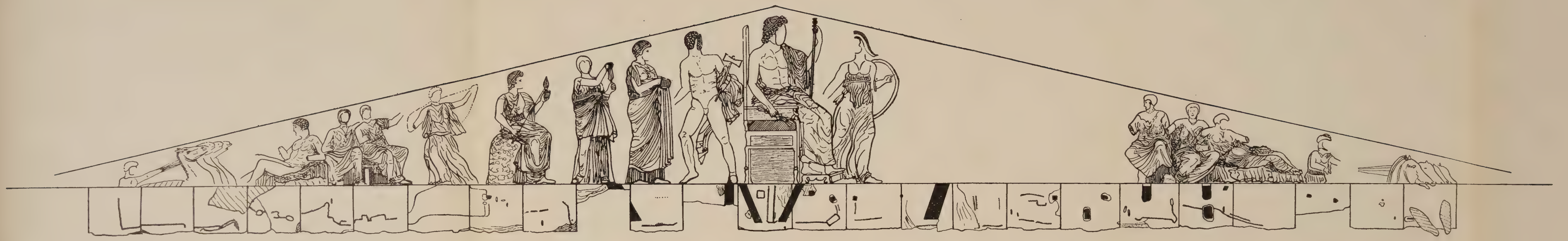
At the risk of being tedious it seemed necessary to make this preliminary study before attempting a restoration of the east pediment. But if we now turn to Figure 7 and Plate III A, we shall see that it is possible to utilize the figures of the Madrid Puteal and yet conform with all the preceding indications.

It will be seen that the use of the slanting bar is the same as in the west pediment. The only difficulty is the need to assume for the middle Fate a plinth somewhat broader than herself in order to bring her weight upon this bar; but the use of a plinth is not exceptional among the Parthenon statues. Half of the weight of Hephaestus is similarly taken away from the cornice by an iron bar under his foot; and here, since the bar is not shared by another statue, it has no need to be set at a slant with the tympanum. For the great central mass

[1] *Cf.* P. Hertz, *Kompositionen af den centrale Gruppe i Parthenons vestlige Gavlfelt*, pp. 15–19.

[2] In much the same way Carrey seems to have pulled the frieze figures out laterally in drawing them. *Cf. A Guide to the Sculptures of the Parthenon* (1908), p. 64.

[3] The marks on block 10 are to be explained as indicative of chariot-wheels which had disappeared before Carrey's time.



A

B

Plate III. The Pediments of the Parthenon: (A) East Pediment, with Six Figures Restored from the Madrid Puteal
(B) West Pediment, Carrey's Version Re-Drawn to Fit the Floor-Marks

of the solid throne and the colossal torso of Zeus, two converging iron bars were used, in order to distribute the weight by spreading it. The raised ridge between these bars marks the center of the pediment; but I cannot further explain its significance for setting the statue. The footstool of Zeus fits the marks on the next floorblock to the right, which shows a peculiar diagonal corner-setting, whose function is not obvious.[1] The large square cutting near the iron bar may have served as a socket for the sceptre of Zeus. Athena is the only figure from the Puteal which will not readily and automatically fit the floor-marks. I can discover no solution which will harmonize with these indications and preserve the balance of the pedimental composition, unless the goddess is partially concealed by Zeus and is emerging from behind his footstool.[2] Perhaps this device served to suggest the physical issuing forth of the daughter from her father, which could no longer be shown in the naïvely literal manner of the black-figured vases. Except for the suppression of the flying Nike (which may equally well be included) this is the only respect in which I have ventured to depart from the strictest letter of the Puteal. To have been less conscientious might perhaps have yielded a more agreeable drawing; but one must accept the tyranny of such a method.

For the next figure to the right of Athena it is possible that we should accept the well-known torso,[3] which is practically excluded from any position in the left wing of the pediment by its raised right arm. This may betoken a Poseidon leaning on his trident, for which an attachment-mark in the floor would serve. But as the torso is a trifle larger in scale than this place would readily warrant, I have not ventured to introduce it in my drawing. In any case, it is clearly to be inferred from our principles of interpreting the floor-marks that beyond Athena there came two standing figures, each of whom set a foot upon the slanting iron bar. Beyond these the raised setting-lines give the clearest possible indication of either a throned or a recumbent figure; and as the latter is out of place, we have every right to assume a seated divinity balancing Clotho. A counterpart to Eileithyia must have filled the remaining gap and completed a very exactly balanced composition, centered upon the colossal throned Zeus.

[1] This agrees, however, with a peculiar detail on the Puteal. There the long side of the footstool is *drawn in perspective* instead of being carved in relief. Is it possible that in the pediment the side of the footstool was thus *drawn* in illusionary perspective in order to gain space behind for Athena?

[2] The remarkable absence of any iron floor-bar here is a strong indication that the main weight of statuary in this space must have fallen well back from the edge of the cornice, close to the tympanum.

[3] *Sc. P.*, pl. 13, no. 11.

IV. Esthetic Prejudices

Such a restoration is certain to arouse protest.

It will be said that it contains no trace of the compositional methods apparent in the west pediment as Carrey recorded it. To this it may be replied that the same diversity of compositional scheme is obviously characteristic of the Olympian and the Aeginetan pediments, in neither of which does east agree with west. As in the corresponding position at Olympia, the center of our restored pediment shows vertical open spaces between clearly separated (but by no means unrelated) figures.

Or again, it will be objected that the scale of the statues changes at least three times: there is one size for the wing-figures, in the Elgin marbles, a second size for Clotho and Lachesis, a third for Aisa, Hephaestus, and Athena, and a fourth for Zeus. To which we shall be constrained to answer that this may offend our own taste, but clearly did not the ancient; for the Olympia east pediment and the Parthenon west pediment change scale in just this way.

Lastly, it will be intimated that a restoration such as ours is inconceivable of the great Phidian artists of the Periclean Age. Perhaps so; yet here we are upon notoriously uncertain ground. It must be admitted in favor of my side of the argument that my sketch is a poor affair and that little alterations of placing or scale[1] or attributes might work considerable improvement. A good modern artist could perhaps do much with the hint which I have given in so baldly archaeological form.

One final point remains to be raised. I have assumed that the Puteal Fates are stylistically accurate copies of the pedimental originals. How is this possible when their prototypes were so high above the ground and so inaccessible? How, we might reply, was the Eleusis version of Cecrops and his daughter[2] made to the scale of $^1/_3$ its original; or how could the Hertz head[3] be so accurately rendered from the lofty and inaccessible Nike of Paeonius? Is it not possible that the sculptor's original models, his τύποι, were either dedicated or preserved as heirlooms in the family ateliers of antiquity, to be utilized by subsequent imitators?

Rhys Carpenter

Bryn Mawr College

[1] In particular, a less rigid observance of isocephaly and a reduction of Aisa more nearly to the proportions of her sister Fates would produce a distinct gain. All the central figures may have been taken too large in my sketch.

[2] Published by Philios, Ἐφημερὶς Ἀρχαιολογική, 1890, pl. 12. Cf. p. 220

[3] *Röm. Mitt.*, IX (1894), Pl. VII; Schrader, *Phidias*, figs. 154, 156.

Archaeological
Institute
of America

ARISTIDEAN TRIBUTE IN THE ASSESSMENT OF 421 B.C.[1]

The question to be considered in this paper, whether Athens after the Peace of Nicias lowered the tribute of her subject-allies so that they, too, might share in the blessings of peace, or whether she continued in force the high scale of Cleon's assessment of 425 has been answered in the negative by historians like Beloch and Meyer,[2] but it has been answered without ever having been properly considered. Except for Beloch, who dismissed the problem with a word,[3] it seems never to have entered the minds of historians that Athens was faced with a real problem in 421, and they have taken it for granted that Athens shifted the burden of war debts from herself to the subject cities by refusing to lower the tribute during the years of peace.

It might be appropriate to ask, for what purpose was the war debt of Athens incurred, not that it makes much difference for what purpose war debts arise, when a country is insistent enough and strong enough to shift its burdens to the shoulders of others for whose account technically they may have been incurred. Athens could say that as defender of the Delian League she had borrowed money to carry on the war, and that the members of the league had not borne their share of the labors and expenses. But this would have been hypocrisy and unnecessary. Athens was strong enough to do as she pleased about the tribute. She had two alternatives. She could follow in the footsteps of the realist Cleon who scorned subterfuges of this sort, believing that the strong need no justification for their actions except their own advantage. She would then continue to exploit the empire merely because she could—historians have thought this the temper of Athens in 421—or she could allow the allies a share in the benefits of peace. The problem of our paper, restated, is this. Are modern historians right in assuming that the high idealism and the pan-Hellenic spirit of the Athenian Armistice Day, portrayed in the *Peace* of Aristophanes, evaporated before it

[1] A paper read at the meeting of the American Historical Association at Richmond, Va., Dec. 27, 1924.

[2] Meyer, *G.d.A.*, IV, 488; *cf. Forsch.*, II, 134 ff.; Beloch, *Gr. Gesch.*[2], II, 1, 356, II, 2, 342 ff.; Busolt, *Gr. Gesch.*, III, 2, 1286 f.; Cavaignac, *L'Histoire Financière*, 135, 141. The problems raised by Andoc., *de pace*, 9 (Aesch., ii, 175), (Andoc.) *in Alcibiad.* 11, and Plut. *Aristides*, 24 deserve separate treatment.

[3] *Rh. Mus.*, XXXIX, 43. Beloch here saw what the situation in 421 demanded, but lacking evidence to prove a lowering of the tribute, he took the wrong course. Since that time the dates of several fragments of assessment and quota lists have been discovered. Consequently we have means of comparison not available to Beloch when he wrote his article.

found expression in an act of justice toward long-suffering allies desirous of release from their war-time burdens?

Before we consider the character of the assessment which followed the Peace of Nicias,[1] we must try to enter into the thoughts and feelings of the audience that listened to the other *Peace* in the spring of 421, the comedy of Aristophanes. The play was produced at the Dionysiac festival to which had come the allies bringing their annual payment of tribute, and as this was the very eve of peace,[2] every one must have known that the treaty about to be signed required Athens to exact no more than the Aristidean tribute from six of the rebels of the Thracian districts.[3] By this clause Athens renounced the right both of exacting the sums assessed against Acanthus and two other cities in 425, and of raising the tribute of Olynthus and her fellow rebels of 432 to sums that would correspond with those paid by their loyal neighbors since 425.

The question of the hour must have been, are the loyal allies to fare worse than the unrepentant rebels? Two political philosophies were struggling for the control of Athens. That ruthlessly applied by Cleon, the two hundred per cent Athenian who had been killed near Amphipolis a few months before, now voiced by the less able Hyperbolus, can be summed up in the words of Thucydides,[4] "The powerful exact what they can, and the weak grant what they must," or in words put into the mouth of Cleon himself,[5] "Pity and fine language and generosity to the fallen" are the things that chiefly militate against empire. The other point of view is found expressed in a quotation taken from the Melian debate,[6] "The path of safety is to maintain our rights against equals, to be polite with superiors, and to be moderate with inferiors." Here we have expediency speaking, but an expediency of gentler strain than that of the realist Cleon, an expediency characteristic of many of Cleon's opponents now in the saddle.

But Aristophanes was moved with nobler thoughts. He spoke

[1] For the date and occasion of this assessment, see West and Meritt, *A.J.A.*, 1925, pp. 59–69. In the spring of 421 Athens no longer had to contend with Cleon, for he had been killed in the battle before Amphipolis in the autumn of 422. Yet in a certain measure the assessment of 421 was his work, since his underrated successes Thraceward had made a reassessment of the Thracian district expedient, and his death, by clearing the road to peace, had lessened the financial pressure on Athens. The treaty, Thuc. v, 18, even required certain changes of tribute. Consequently the time was ripe for a general reassessment. But since the assessment, like the peace, was carried through by Cleon's erstwhile opponents, Nicias and the other Moderate Democrats, on *a priori* grounds, we should expect it to conform to their political views of empire. Beloch, *Rh. Mus.*, XXXIX, 43, realized this, but he did not have the courage of his convictions.

[2] The treaty was ratified on Elaphebolion 25 about two weeks after the Dionysiac festival at which the play was produced. Thuc. v, 19 f.

[3] Thuc. v, 18.

[4] Thuc. v, 89; Jowett's translation.

[5] *Ibid.*, iii, 40; Glover, *From Pericles to Philip.*, p. 159.

[6] Thuc. v, 111.

for those in Athens who felt a very real love for "distracted Hellas brought to wrack and ruin by this tanner fellow." [1] In Aristophanes' play from which I have just quoted, the pan-Hellenic sentiments of the author shine forth on every page. The "happy morn of Peace" was to be "the source of every joy to Hellas." [2] It was to

> "Solder and glue the Hellenes anew
> With the old-fashioned true
> Elixir of love,
> And attemper their mind
> With thoughts of each other
> More gentle and kind." [3]

Peace was to soften the hearts of peasants made bitter by war. The chorus sings:

> "I would never more thereafter so morose and bitter be,
> Nor a judge so stubborn-hearted, unrelenting and severe;
> You shall find me yielding then,
> Quite a tender youth again,
> When these weary times depart." [4]

In particular, Aristophanes felt a deep sympathy with the subject cities vexed by many suits and burdened with tribute.[5] He excuses them for rebelling,[6] and he pledges to them milder treatment from the citizens gathered together in assembly.

> "And they'll be milder so, and we shall live like lambs among ourselves,
> And be much gentler to our dear allies." [7]

In this passage Aristophanes breathes the new spirit that was possible only after the death of Cleon and the defeat of Hyperbolus. No longer does Aristophanes speak of the subject cities, as in the passage where he describes their grievances. They are now allies. But this change of name comes only after we learn that the lamp-dealer Hyperbolus was a makeshift political light, now extinguished through the efforts of the poet, who had been fighting both for Athens and as he says for the other islands too.[8]

The audience before whom this play was presented was full of citizens from the subject cities, now become allies through the dictum of Aristophanes, and they participate in the celebration

[1] *Peace*, 269 f., 646 f.
[2] *Peace*, 435 f. I quote here and elsewhere from Rogers' translation.
[3] *Ibid.*, 996 ff.
[4] *Ibid.*, 348 ff.
[5] *Ibid.*, 619 f., 639 ff.
[6] *Ibid.*, 619 ff.
[7] *Ibid.*, 934 ff.
[8] *Ibid.*, 685 ff., 760, 866, 921.

which heralds the return of the handmaidens of Peace to earth. To them is thrown the sacrificial corn, symbolic of the share that all would receive of the benefits of peace, and with the corn went the peculiarly Aristophanic comment "There's not a single man amongst them all but has at least one corn." [1]

The *Peace* of Aristophanes is not to be considered merely a work of propaganda like so many of his plays. It lacks the crusading spirit, for the man against whom Aristophanes had fought for years was now dead. The *Peace*, then, is to be considered a mirror of the dominant sentiment in Athens in the spring of 421, in which the ideals of the practical politician, with his disregard for moral and spiritual considerations, had been overwhelmed by the flood of joy that peace had come, by a pan-Hellenic spirit which obliterated the bounds between former enemies [2] and restored to Greece that spirit of coöperation on which the Delian League had been based, a spirit now so long buried deep with the Goddess of Peace.

With Cleon dead, with the light of Hyperbolus' lamp extinguished, and with political control in the hands of men who like Nicias were working, so Plutarch says, "to deliver the other states from the evils and calamities they labored under," [3] Athens could now carry out in the assessment the promise of kindly treatment made to the allies by Aristophanes, unofficially it is true, but nevertheless made at the one official gathering of the year at which all were required to be represented. Clemency had been promised officially to the unsubdued rebels of the Thracian district,[4] and consistency would demand a uniform policy of moderation throughout the empire.

Fortunately we are not dependent entirely upon *a priori* deductions from the choral odes and questionable puns of Aristophanes for our knowledge of how Athens felt and acted toward her allies. The reduction of tribute has left its traces in stray fragments of assessment and quota lists.[5]

Before going into the evidence furnished by these lists, it will be helpful to recall Grote's scepticism about the increase of tribute in the assessment of 425. He refused to accept the testimony of ancient authors that the tribute had been raised to anything like a thousand talents, even after the island list of this assessment, with its marked increases, had been discovered.[6] His followers, Jowett, for example, who at first rejected Grote's conclusions, pointed to the fragmentary quota lists of the period after 424, as well as to other parts of the assessment list, and they cited figures

[1] *Peace*, 962 ff.
[2] *Peace*, 292 ff., and *passim*.
[3] *Nicias*, 9.
[4] Thuc. v, 18.
[5] *I.G.* I², 64; *I.G.* I², 220. *Cf.* Wilhelm, *Anz. Wien. Akad.*, 1909, pp. 48 ff.
[6] See Vol. VI, p. 54, note 3 and p. 52, note 4 of Dent's edition.

to show that the ratio of increase seen in the island district did not hold good even in other parts of the assessment list.[1]

Now the low quotas which revived Grote's earlier scepticism in the mind of Jowett are easily understood. They are based on an assessment, that of 421, in which Athens used as her standard the pre-war figures, changing them only where catastrophe or good fortune, politics or equity, made some alteration necessary. Possibly we can call this a return to the Aristidean tribute foreshadowed in the Treaty of Nicias. Even some of the fragments of the assessment list, originally assigned to 425, are now known to be from this later assessment list.[2]

We are able to verify this solution of the problem, for we have a fragmentary dated quota list (420)[3] in addition to portions of the actual assessment list.[4] Certain fragments of the assessment list can be definitively assigned to this year. Other fragments are possibly from this year, although they may be from 425.[5] In any case, if we include with those figures the dates of which are certain other high figures from the list of 425, and if we can still show that the combined list was drawn up on a scale lower than that of 425, our point will be made.

The figures most instructive are those from the quota list for the island of Rhodes, for they are most complete.[6] We lack only the quota paid by Kamiros. Taking the island as a whole and estimating arbitrarily the tribute of Kamiros as nine talents, a 50 per cent increase, the highest rate of increase recorded for the island, we have a total increase of 43½ per cent above the pre-war figures, a very moderate increase considering the prosperity of Rhodes and the much higher increases for the island district in 425.[7] In fact,

[1] Jowett's translation of Thucydides, Oxford, 1910, xliv ff.

[2] For the most recent discussion of this assessment see West and Meritt, *A.J.A.*, 1925, pp. 59–69, with bibliography there cited.

[3] Wilhelm, *loc. cit.*, has shown that *I.G.* I, 262, and *Suppl.*, p. 72, 272 b are from the same quota list as *I.G.* I, 260. In *I.G.* I², they appear as No. 220.

[4] *I.G.* I, 37 frgs. y and z″, *Suppl.*, p. 140 f. *Cf.* West and Meritt, *loc. cit.* These form a part only of *I.G.* I², 64.

[5] Bannier, *B. Ph. W.*, 1916, 1067–1070, has assigned frgs. t–w of *I.G.* I, 37 to an assessment list other than that of 425–4. In the horizontal stroke above Λίνδιοι it resembles the list of 421. Hiller von Gaertringen assigns them definitively to *I.G.* I², 64, the list of 421.

[6] See *I.G.* I², 220.

[7] The quota lists show a steady growth of prosperity for Rhodes antedating the Peloponnesian War. About 440, Lindos was paying six talents tribute, *I.G.* I², 204. In 432–1 this had been increased to ten talents, *I.G.* I², 213. During the Peloponnesian War, probably at the time of the reassessment of 425, this was increased again to an unknown amount. We know of this change through fragments of one of Antiphon's speeches, *On the Lindian Tribute,* a protest against the new assessment. *Cf.* Busolt, *Gr. Gesch.*, III, 2, 1118, note, 3. In 421 Lindos was paying fifteen talents, a 50 per cent increase over the pre-war figures. Whatever the figures for 425 may have been, there can be no doubt that Lindian prosperity was responsible for this steady increase. Ialysos, on the other hand, assessed before the war at six talents, *I.G.* I², 213, in 421 paid only five talents, a decrease to be explained by apotaxis, for Brikindaria, a deme of Ialysos, and possibly the Diacrians of Rhodes, now pay tribute in their own names. Counting

Rhodes in 421 was paying only a trifle more than Paros in 425, although its area was six times as great and it was at the dawn of its great fourth-century prosperity.[1]

Beloch, who believes that there was no reduction in 421, and in consequence takes the figures of 421 as those of the assessment of 425, expresses surprise at the low assessment of Rhodes.[2] It is one of the inequalities of the tribute he cannot explain. His basis of comparison is wrong. On the whole, the lowness of the Rhodian tribute can best be explained as the result of a general scaling down throughout the empire, and since we have here departures from the pre-war scale, we must presuppose that the assessors took into account the economic changes. Possibly they were trying to equalize the tribute by raising it in districts notoriously undertaxed, a feature of these war assessments on which Beloch lays much emphasis.[3]

I shall now show that the reduction in Rhodes is equalled or exceeded in the majority of cities whose payments or assessments are known.[4]

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these two as originally Ialysian, the increase for Ialysian territory was from six talents in 432 to eight in 421, exactly a third. For Brikindaria, see Pauly-Wissowa, Suppl. IV, *s.v.*, *Ialysos*. The total for Rhodes in 421 was 33 talents, Lindos 15, Pedies of Lindos 1, Ialysos 5, Diacrians 2, Brikindaria 1, Kamiros 9 (estimated). It had been before the war about 23 talents, Lindos 10, Kamiros and Ialysos 6 each, and Pedies of Lindos $\frac{5}{6}$ T. If *I.G.* I², 214 is rightly dated before 425, our figures for Ialysos will show a decrease from ten to five talents, and our percentage of increase must be lowered. But this is uncertain. Still if we should compare the quota of 421 with that immediately preceding 425, we should have to add possibly two talents to the Rhodian tribute, thus decreasing the percentage of increase from 43½ to 32. See page 145 *infra*.

[1] The tribute of Paros by the assessment of 425, *I.G.* I², 63 was 30 talents. For area see Beloch, *Gr. Gesch.*², II, 2, 369.

[2] *Gr. Gesch.*², II, 2, 369 ff.

[3] *Op. cit.*, II, 2, 371.

[4] I must comment here on what appear to be large increases for Iasos and Miletus, the former from one to three talents, the latter from five to ten. Our last quota records for Iasos, before 421, are found in *I.G.* I², 213 and 212, 432–1 and 433–2. In *I.G.* I², 213 a broken H appears on the stone in such a position as to suggest that one or two initial figures have disappeared. This is an indication that the tribute of Iasos had been increased from the talent it had paid in the first three periods. Probably we ought to restore an H, possibly two, before the one on the stone. Thus the increase at Iasos would be at most 50 per cent, possibly none. The part of *I.G.* I², 212 containing figures for Iasos is no longer legible, and the copy on which Kirchoff had to depend is hardly intelligible.

For Miletus we have no figures at all for the period between 440 and 421. Meyer, *G.d.A.*, IV, pp. 65, 71, says that at least by 432 Miletus, having regained Leros and Teichioussa, was paying ten talents tribute instead of the five she had paid before 440. I think he is right, and if he is, there would be no increase for Miletus in 421. Cavaignac, *op. cit.*, p. 130, also states that the tribute of Miletus before 425–4 had been ten talents. The evidence on which the statements of Meyer and Cavaignac are based is probably *I.G.* I², 214, an inscription the date of which is still uncertain. But since both Miletus and Iasos are doubtful, I have forestalled possible criticism by including them in my list of cities whose tribute shows an increase.

TABLE I

Ionic-Karic	*Lists from which figures are taken*	*Before 431*		*421*		*I.G.* I²,
Brikindaria				1 T		220
Brykos	*I.G.* I², 198		500 dr.		500 dr.	64 w.
Diacrians of Rhodes				2		220
Diosiron	“ 205		500		500	220
Elaious of Erythrae	“ 205		100		100	64 w.
Edria, etc.				6		“
Hydaia	“ 198 (?)		1200		2000	“
Ialysos	“ 213	6 T		5		220
Iasos	“ 213	1 (?)		3		“
Ityra					4000	64 w.
Karyande	“ 213		500		1000	“
Kelenderis				2		64 w.
Kindye	“ 205	1		1 ?		64 v.
* Kolophon	“ 213	4			500	220
Lindos	“ 213	10		15		“
Miletus	“ 205	5		10		“
Myndos	“ 213		500		1000	“ and 64 w.
Notion	“ 213		2000		2000	“
Pedase	“ 198	1			3000	64 w.
Pedies in Lindos	“ 213		5060	1		220
Syme	“ 211		1800		3000	64 w.
Tarbene	“ 192 (?)		1030		1000	“
Telos				2		“

Names not found before 431: 6. Tribute before 431 ca.: 30 T, 1190 dr.
Names found before 431: 17. Tribute in 421: 51 T, 600 dr.
Tribute of cities whose names are not listed before 431: 13 T, 4000 dr.
Per cent of increase: 70.
Per cent of increase for names found before 431: 24.

* The decrease of the Kolophonian tribute was due to the seizure of the city by the Persians.

TABLE II

Thracian	*I.G.* I²,	*Before 431*		*421*		*I.G.* I²,
Aioleion	211		500 dr.		500	64
Bormiskos					1000	“
Drys				1 T		“
Gale	212		3000		10	“
Herakleion					100	“
Istasos	211		500		500	“
Kamakai					600	220
Kleonai	211		500		100	64
Mecyberna	212	1 T			10	“
Othoros	211		500		1000	“
Pharbelos	212		500		500	“
Posideion					500	“
Prassilos					900	220
Sale					3000	64
Sarte	212		1500		100	220
Serme	213		500		500	64
Singos	212	1			10	“
Sinos	212		1500		500	220
Trailos				1		64
Tripoai					500	220
Zereia					500	64
Zone				2		64

Names not found before 431: 11. Tribute before 431: 3 T, 3000 dr.
Names found before 431: 11. Tribute in 421: 5 T, 4830 dr.
Tribute of cities whose names are not found before 431: 5 T, 1100 dr.
Total per cent increase: 66.

Per cent of *decrease* for names found before 431 cannot be taken into consideration because of the unusual conditions at Singos, Mecyberna, and Gale.

TABLE III

Islands	*I.G.* I²,	*Before 431*		*421*		*I.G.* I²,
Hephaistia...........	204	3 T		2 T		220
Imbros..............	"	1		1		"
Myrina.............	"	1	3000 dr.		500 dr.	"
Total............		5 T	3000 dr.	3 T	500 dr.	

Decrease: 2 T, 2500 dr. (ca. 50 per cent).

It is to be noted that Hephaistia probably paid 4 T tribute by the assessment of 425, *I.G.* I², 63. Thus we have a decrease from the war assessment.

TABLE IV

Hellespontine		*421*	*I.G.* I²,
Bisanthe..............................	2 T		64
Artaion..............................		1000 dr.	"
Metropolis by Priapos...................	1		"
Otlenoi..............................		2000	"
Pythopolis...........................		100	"
Sombia..............................		4000	" and 220.

Increase: 4 T, 1100 dr.

SUMMARY

TABLE V

	Number of Names	*New Names*	*Tribute before 431*		*Tribute of New Names*		*Tribute of 421*	
Ionic.......	23	6	30 T	1190 dr.	13 T	4000 dr.	51 T	600 dr.
Thracian....	22	11	3	3000	5	1100	5	4830
Islands......	3	0	5	3000			3	500
Hellespont...	6	6			4	1100	4	1100
	54	23	39 T	1190 dr.	23 T	200 dr.	64 T	1030 dr.

TABLE VI

	Number of Names	*New Names*	*Tribute before 431*		*Tribute of New Names*		*Tribute of old names, 421*	
I.G. I, 37, frgs. v, w.......	13	4	2 T	5530 dr.	10 T	4000 dr.	2 T	5600 dr.
z″, etc......	23	14	3		9	800		3130
Quota list...	20	6	33	2160	3	5400	37	5100
	56	24	39 T	1690 dr.	23 T	4200 dr.	41 T	1830 dr.

The discrepancy between the totals of Tables V and VI is due to the fact that Myndos appears in both *I.G.* I², 64 frg. w and *I.G.* I², 220 and that Sombia appears in both *I.G.* I², 220 and frg. z″ of *I.G.* I², 64.

I shall combine here the data from the quota list and the assessment list to give as broad a basis as possible for our calculations. The two lists contain means for estimating the tribute of about fifty cities, twenty of which are not found in pre-war lists. The total tribute amounts to a little more than sixty talents, an increase of 64 per cent over pre-war figures, about the same as the increase of names.

Some of these are undoubtedly net additions to the list. Others like the Samothracian cities of the mainland previously had paid through their metropolis about the same amount they were now assessed. Probably they should be excluded from our reckoning.

But I have used the figures as they stand, counting everything an increase that is doubtful, and considering all names for which we have no figures preserved before 425 as though they were real, not nominal, additions to the list of tributaries.

To obtain a fairer basis of comparison it will be necessary to analyze our tables name by name. Let us begin with the Samothracian tributaries of the mainland.[1] They are not found before 421, but whether they were first assessed in 425 or 421 it is now impossible to say. Fortunately here we have a means of comparing their tribute in 421 with their earlier share in the Samothracian tribute which at first amounted to six talents. With the growth of Odrysian power on the mainland, Samothrace presumably lost control of her Peraea, for during the first years of the Peloponnesian War[2] the island paid a reduced tribute of two talents. Athens was in no position to protest against Odrysian aggressions at that time, for she needed the help of Sitalces, a pro-Athenian prince. His successor, Seuthes, showed little friendship toward Athens, and at the time of Cleon's Amphipolitan campaign it would seem as though Athens was strong enough to reassert her authority over this district.[3] But instead of returning the cities to Samothrace, Athens enrolled them directly in the empire. Their assessment of three and one-half talents is less than the reduction granted to Samothrace because of their loss. Thus we should expect to find the assessment of Samothrace and her dependencies in 421 to be about six talents. There would have been no increase there, and we should on that account add three and a half or four talents to our total tribute paid by the cities enrolled before 431. This would lower the percentage of increase from 64 to 50 per cent.

Likewise we were probably wrong in including as cities not found before 431 Kamakai and Tripoai. They were Bottic towns and had undoubtedly contributed their share to the tribute of Spartolos. What it was we cannot say, but I think we may take it for granted that it was not less than their assessment in 421. They had just been welcomed back into the empire, and as the other rebellious cities were promised the Aristidean tribute if they would submit, it is probable that the terms granted to the Bottiaean towns that did not wait for the Peace of Nicias were not less lenient.[4] Others of

[1] Drys, Zone, and Sale, Hdt., vii, 59, 108; Steph. Byz., *s.v.* Δρῦς. *Cf.* Perdrizet, *Rev. Et. Grec.*, 1909, XXII, pp. 33 ff. But Perdrizet dates our assessment in 425 and fails to take into account the Odrysian empire.

[2] Beloch, *Gr. Gesch.*², II, 2, 366, in computing the tribute of the Peraea as between four and five talents, does not cite *I.G.* I², 218, which confirms his conclusions by showing that at the height of Odrysian power the Samothracian tribute was reduced to two talents.

[3] West and Meritt, *A.J.A.*, 1925, p. 68.

[4] For Bottic relations with Athens see Meritt, *A.J.A.*, 1925, pp. 29–31, and West and Meritt, *A.J.A.*, 1925, pp. 61, 64. Tripoai is found in the assessment list of 421 but since no figures are extant, I did not cite it in the table. *I.G.* I², 64.

this group are possibly to be found in our Thracian list, Prassilos for example, for the location of some of the Thracian towns is unknown.

Our tables show that in the Ionic and Hellespontine districts the cause for the large percentage of increase is the number of new names. For the Hellespontine list we have the name of no city found before 431. Thus the four talents of our Table IV is a net increase, almost entirely of expected tribute. Except for Sombia and the Otlenoi we have no means of telling whether the tribute was collected or not.[1] The same is true to a lesser degree of the Ionic list. Kelenderis and the Edriaean syntely may never have paid the eight talents they were assessed.

Consequently, to provide an adequate basis of comparison with the pre-war quota lists we should take the quota list of 421 which will give the actual and not the expected income. Here our increase amounts to eight and one-half talents out of about thirty-three, about 25 per cent. A glance at our last table will show how our lists have been padded by using the assessment list fragments, particularly those for which we can give no certain date.

Finally since the pre-war tribute of Miletus and Iasos is uncertain, we ought possibly to leave them entirely out of consideration. In all probability, however, there was no increase at Miletus, and at Iasos the increase was probably a talent at most. If this should prove to be correct, the quota lists would show no increase in 421 above the assessments of 431 and before.[2]

In one point our figures are open to criticism. The tribute of Colophon,[3] since its seizure by the Persians, and of Singos, Mecyberna, and Gale, because of their dismantlement by the Chalcidians,[4] was purely nominal in 421. By using these nominal figures we have probably made the increase seem really smaller than it was, almost six and one-half talents to be precise. Yet we have included in our figures the increased tribute of Rhodes, due as we have assumed to local developments such as increased prosperity, and we ought not to be debarred from balancing the local prosperity of one district with the loss of population in others, where our purpose is to compare the total received in 421 with the tribute of the same area in 431. When we tabulate the individual increases, and compare them with the decreases, it will be necessary of course to exclude such decreases as are due to the accidents of war.

[1] See *A.J.A.*, 1925, p. 63. The Otlenoi are to be restored in the first line of *I.G.* I, 263 b (*I.G.* I², 221), an inscription that dates very soon after 421. See p. 146, *infra*.

[2] If the Kyromes, listed with the Edries, are the same as the Hyromes of the earlier lists, we must subtract from our net increase 2500 drachms. *Cf. I.G.* I², 200.

[3] Thuc. iii, 34; Meyer, *G.d.A.*, IV, 353. The Colophonians who paid their nominal tribute were probably a remnant settled at Notion.

[4] West and Meritt, *A.J.A.*, 1925, pp. 64 ff.

There are seven proved increases in our list, not including Miletus and Iasus, six decreases, excluding Colophon, Gale, Singos, and Mecyberna, also Tarbene where the decrease is too slight to be reckoned, and Ialysos where apotaxis is known. For eleven cities there was no change. Thus in two thirds of our list the pre-war figures were retained or lowered.

Up to this point we have assumed that cities not found in our lists before 431 were brought in by either the assessment of 425 or that of 421. This is not altogether true, for in an undated fragmentary list which, for various reasons that I cannot discuss here, must be assigned to the period before 425 are found the names Telos and the Diacrians of Rhodes.[1] Unfortunately the quotas have been lost, and no comparison is possible. But that is of little importance to us now. The really important feature of this early list is the fact that it is the prototype of the quota list of 421, also of the questionable assessment list of that year,[2] in having Miletus listed with her two dependencies, besides having the two new names we have already mentioned. If we had the figures, it would give us a much better basis of comparison than those we have been forced to adopt (the figures before 431) for want of better. If we had been able to use the figures of 426–5, for example, we would not have listed the two talents of Telos nor the two talents of the Diacrians as net increases. There might have been changes here, amounting perhaps to 50 per cent of their earlier quota, but even so, our net increase for the list as a whole would be reduced about two talents or more.

I should like here to analyze another fragmentary list, dating between 420 and 417,[3] *i.e.*, in the assessment period we are discussing. It contains many of the names found in our lists, and where comparisons are possible the figures are the same, Miletus, Lindos, and Karyande. Except for the petty Saros, paying 200 drachms tribute, there are no new names [4] not found in the lists we have discussed. From it we get additional figures for the Auliatai, Karpathos, Kasos, and Chalke. The only change in tribute is that of Carpathos from 1000 to 1500 drachms. Thus to our list of eleven cities with unchanged tribute we should add three, and to our seven increases we have one to add. Not counting Lindos and Miletus, six cities of this list paid in 420 one talent 200 drachms, an increase over the

[1] *I.G.* I², 222. Wilhelm, because of the character of the writing, dates it before 425, *Anz. Wien. Ak.*, 1909, p. 51.

[2] *I.G.* I, 37 frgs. t–w. Nevertheless, Hiller von Gaertringen does assign them to *I.G.* I², 64.

[3] Wilhelm, *op. cit.*, p. 49, and Bauer, *Klio*, XV, 188 ff., show that *I.G.* I, 263, *Suppl.* 272 a, and 272 c are from the same list; now *I.G.* I², 221. Both Kirchoff and Cavaignac, *op. cit.*, p. xlvii, date it after 425–4, but because of its many resemblances to the quota list of 421, I think it is the list of 420–19, 419–8, or possibly 418–7. There are historical reasons also for dating it then.

[4] By new names I mean names of cities not found in quota lists before the war.

tribute of five of them before 431 (Saros was not tributary before 431) of 700 drachms, or about 13 per cent. (It is worth noting that the Otlenoi found among the Hellespontine cities of the assessment list appear here and nowhere else as paying their quota.[1])

Another undated quota list from the same period, *i.e.*, after 421,[2] contains only island names. This is possibly the most valuable of all our fragments, for it enables us to compare the scale of assessment in force after 421 directly with the war-time assessment of 425, as well as with the pre-war figures.

Table VII

	Before 425		*I.G.* I², 63		*I.G.* I², 224	
Ios		3000 dr.	?			3000 dr.
Sicinos				1000 dr.		500
Kythnos	3 T		6 T		6 T	
Naxos	6	4000	15		7	
Pholegandros				2000		1000
Keos	4		10		6	
Paros	16	1200	30		18	
Myconos	1		?		1	
	31 T	2200 dr.	61+	3000	38 T	4500 dr.

Table VIII

	Before 425		*Assessment of 425–4*		*I.G.* I², 224	
Sikinos	?			1000 dr.		500 dr.
Kythnos	3 T		6 T		6 T	
Naxos	6	4000 dr.	15		7	
Pholegandros				2000		1000
Keos	4		10		6	
Paros	16	1200	30		18	
	29 T	5200 dr.	61 T	3000 dr.	37 T	1500 dr.

Table VII shows an increase above the earlier figures in every case but two, but in most instances the increase is slight. Only at Kythnos is the percentage large. The total increase is less than 25 per cent.

But more instructive than the comparison between the figures before 425 and those of 421 is that between the assessments of 425 and 421. There was a decrease of nearly 25 talents out of 61, a decrease of approximately 40 per cent. There can be no question here as to the fact that the tendency of the assessment of 421 was downward.

[1] At the top of *I.G.* I, 263 b (*I.G.* I², 221) we have two lines followed by a gap. Since there is no Thracian city whose fifth and sixth letters are νο and only one elsewhere, we must restore [᾽Οτλε]νο[ί] in line 1, [᾽Αζει]ε̃ς in line 2, and in the gap between that and the next name we can read Θραίκιος on the analogy of *I.G.* I², 218.

[2] *I.G.* I², 224. Hiller von Gaertringen dates it before 426–5, but I cannot agree with him. The figures show too many differences from those of the last lists before 425. In only one case do the figures of our stone agree with earlier payments. Thus it cannot go before 425. For exactly the same reason it cannot go in the assessment period of 425–421. Thus it must be dated after 421, or at least after another assessment. In itself, this list proves that there was an assessment after 425–4.

In this list we have two names not assessed before 431, but one of them Sikinos, like Telos and the Rhodian Diacrians, is found in a list antedating 425.[1] Table VIII shows that the island increase in 425 for the six cities included therein was about 105 per cent, whereas Tables I–VI, as they stand, show that the highest possible rate of increase in 421 was less than 65 per cent. But if we make the necessary adjustments, the percentage is considerably reduced.

Let us combine the figures of the two additional quota lists with Table V, after making the necessary corrections for Telos, the Rhodian Diacrians, Miletus, Iasos, the Bottiaean cities, and the Samothracian dependencies, also omitting the losses from Colophon, Singos, Mecyberna, and Gale. The total tribute before 425 is now about 78 talents, increased by the assessment of 421 to 103 talents, an increase of 32 per cent. If we make no corrections at all, the percentage of increase is 40, from about 72 talents to 103. On the other hand, if we figure on the basis of the uncorrected quota lists alone, the percentage of increase is reduced to 25. This will be reduced to 17 per cent if we make the corrections indicated above.

If we had complete assessment and quota lists for 421, we should expect to find that the assessment was higher than the tribute paid in, for an assessment list gives the estimated, not the actual receipts. Consequently we are not surprised when we find that the combined assessment and quota lists show a higher rate of increase than the quota lists alone, due mainly as we have seen to the inclusion of cities whose names do not appear in quota lists. Of course some of them did pay tribute, and it is only accident that we do not find their names in the quota lists, but there were others presumably, like Melos and the Black Sea ports, possibly Kelenderis of Cilicia and the Edriaean syntely, who were able to keep the tribute collectors at arm's length.

Our uncorrected lists show that the assessment list was approximately 12 per cent higher than the quota list. Our corrected lists give about the same variation. Let us assume that our figures taken from the undated island list are fairly representative.[2] There the increase of tribute in 425 was a little more than 100 per cent above what it had been before the war. Assuming again that Pedroli's estimate of 436 T for the pre-war period is accurate (it is possibly twenty talents too high),[3] then the collectible tribute after being doubled in 425 would amount to 872 talents (830 talents by my estimate). Since the total of the assessment list of 425 was 960

[1] *I.G.* I², 223. This belongs with *I.G.* I², 222 in some year before 425, Wilhelm, *op. cit.*, p. 51.

[2] See page 146, *supra*.

[3] Pedroli, *Studi di Stor. Ant.* I, 1891, 199. I have in preparation a paper on the tribute of the years 434–432. While my maximum figures are about the same as Pedroli's 436 talents, I consider it very probable that the actual figures were about twenty talents under my maximum.

talents,[1] we may assume roughly that about 90 talents (or 130 T.) was assessed against cities not actually tributary. Thus the assessment list would give a total about 10 or 15 per cent higher than the quota lists. In general our figures agree, and consequently we must give preference to the results obtained from using the quota lists.

Since the assessment list of 425 shows an estimated increase of about 120 per cent (or 133 per cent), while our estimated increase uncorrected is 40 per cent (corrected 32 per cent) and since the quota lists based on the assessment of 425 presumably showed a 100 per cent increase, while our quota lists show an increase of 25 per cent or less, it is impossible to believe that Athens continued in force the high scale of Cleon's assessment.

Since it has been assumed that the Black Sea ports assessed in 425 were added to the Hellespontine list,[2] it will be interesting to see how far our assumptions as to the ratio between assessment and quota lists holds good in that district. In 432 Hellespontine cities paid 73 talents tribute. Doubling this, we get about 150 talents as the sum of collectible tribute in 425. (If we take Pedroli's figures or consider that the reduction at Selymbria was ephemeral, our figures will be respectively 90 and 180 talents.[3]) Adding 25 per cent for new names, our total becomes now about 190 talents (225 talents according to Pedroli's higher figures). But if we are right in thinking that the chief additions to the empire were in the Euxine area, the increase would be proportionately greater in the Hellespontine district.

Moreover, we have figures to confirm this conjecture. A fragment recently declared to be a part of *I.G.* I², 63 gives the total of the Hellespontine district as 250 talents.[4] In other words, after the tribute of the Hellespontine cities in the empire before 425 was doubled, new cities assigned to this district were listed whose tribute amounted to 100 talents. As it seems unreasonable to believe that the Black Sea region was assessed at more than 100 talents, we may take 250 talents as our approximate maximum figure for the district, even though the fragment has been restored to give a sum of 295 talents.

[1] Wilhelm, *op. cit.*, p. 52. While the stone is so broken that one could restore either 1460 or 960 talents, there can be little doubt that the smaller sum is correct.

[2] Pedroli, *op. cit.*, 240.

[3] *Ibid.*, pp. 201 ff. Pedroli's figures are for the period 429–5. My figures are for the years 434–1 when Selymbria was paying only 900 drachms tribute. I have used the figures before 431 elsewhere in this paper. Consequently I use them here.

[4] *I.G.* I, 543, *Suppl.* p. 54. Bannier, *B. Ph. W.*, 1916, 2067 ff. assigns it to *I.G.* I, 37 (*I.G.* I², 63), with the remark that it has been rightly restored on the analogy of frg. z″. Wilhelm, *op. cit.*, says that it may belong with the assessment list of 425. Cavaignac, *op. cit.*, p. xlv and Pl. I, no. 3, is obviously wrong in joining it with frg. z″, since the two overlap. Hiller von Gaertringen follows Cavaignac in the *editio minor* of the *Corpus*, No. 64.

Fortunately the Hellespontine total for the assessment of 421 has also been preserved in part, but unfortunately the stone is broken on the left in such a way that it is impossible to know whether we have lost any figures there or not.[1] The figures preserved total 95 talents and a fraction, and as there were two spaces to the left of the figures preserved, it has been assumed that the total originally amounted to 295 talents.[2] But this gives us a figure greater than we have considered reasonable even for 425. Furthermore, the additional 200 talents is a gratuitous restoration based on faulty analogy and an accidental similarity to, not identity with the stone of 425, just as the 295 talents restored in the earlier stone was an unnecessary restoration based on the restored 295 talents of the list of 421. But because of these restorations scholars have thought that the stones were practically identical.

Conditions in 421 were quite different from those of 425. Peace had been gained, and the moderate party were now in control at Athens. Moreover, the weakening of the Odrysian empire would naturally affect in some way the Hellespontine tribute, as it actually did, for Bisanthe in the Odrysian sphere, a new name, is assessed in 421.[3] Consequently it would be surprising if the Hellespontine total of 421 was the same as it had been four years before, even without a reduction of tribute in the interval.

Curiously enough, editors in restoring the sum of 295 talents on the authority of the assessment list of 425, have not noticed that there is in the earlier list a space on the stone entirely free from figures. If we leave a similar space in the list of 421, we must be content with a sum smaller than 295 talents, either 95 talents as it stands, or 195 depending on the size of the gap.[4]

Thus the evidence of these restorations, previously accepted without question by all historians, cannot be used to disprove a reduction in 421. On the contrary, analogy of spacing requires us to assume that the reduction in the Hellespontine district was at

[1] *I.G.* I^2, 64, does not give it correctly. See *I.G.* I, 37 frg. z″.

[2] *Cf.* Beloch, *Gr. Gesch.*[2], II, 1, 330; II, 2, 342; *Rh. Mus.*, XXXIX, p. 42 f.; Busolt, *Gr. Gesch.*, III, 2, 1120. Every editor agrees in this restoration. After restoring this to read 295 talents, they proceed to restore *I.G.* I, 543, *Suppl.* p. 54 to read 295 talents by analogy. Then arguing in a circle, they take *I.G.* I, 543 as confirmation of the original restoration, although the two stones have nothing in common, except the one figure representing fifty talents. Nor is the position of that figure the same in both inscriptions. The new edition of the Corpus, No. 64, even gives a composite reading, not showing that the two fragments overlap in such a way that they cannot be considered as parts of one stone.

[3] The assessment of the Samothracian Peraea is a parallel case.

[4] Beloch, *Rh. Mus.*, XXXIX, p. 42 f., was tempted to restore merely an initial hundred talents, but being unable to interpret the evidence correctly, he chose deliberately the larger figure. If he had not done so, there would have been no analogy with *I.G.* I, 543, *Suppl.* p. 54, and no reason for saying that the Hellespontine tribute reached a total of 295 talents either in 425 or in any other year. We must rest content with the knowledge that the Hellespontine assessment in one year, not 421, was at least 250 talents. More than that we cannot say, for a restoration of *I.G.* I, 543 is at present impossible.

least 55 talents, from 250 (minimum) to 195 maximum, possibly 155 talents. Thus the percentage of decrease was between 20 and 60. The decrease in the island names we studied was about 40 per cent, but there presumably the increase had not been so great.

It is difficult to decide whether the Hellespontine total in 421 was 95 or 195 talents, since we do not know how many of the Black Sea cities had been dropped from the list. The difference between the tribute of 73 talents paid in 432 and the 95 (?) talents of the assessment of 421 is about 30 per cent, not very different from the increases shown by our figures. On the other hand, an assessment of 195 talents, even taking Pedroli's higher figures, meant an increase for the district of more than 100 per cent, an increase altogether too large to be accounted for except by the assumption that the Euxine district was listed with the Hellespontine and that there had been no marked reduction from the sums of 425 for these new cities. Then the reduction of fifty-five talents would have affected mainly the tributaries of long standing, not the cities from whom Athens never had collected, and probably never did collect tribute. Consequently, we shall read 195 talents if we believe that Nicias and the Moderates, who were responsible for this assessment, continued Cleon's policy of expansion, or 95 talents, if we think that they rejected that feature of Cleon's program along with his policy of exploiting the existing empire.

Let us again use our island figures for the list as a whole. If Pedroli has correctly estimated the average tribute before the war at 436 talents, since the total for the assessment of 425 was 960 talents, a sum that was never collected, a reduction of 40 per cent meant an estimated tribute in 421 of about 575 talents (675 talents if we add 100 talents for the Black Sea region). This represents an increase over the tribute paid before the war of about 33 per cent. If my figures are correct, 415 talents of pre-war tribute, the increase is not quite 40 per cent. Adding 100 talents for the Black Sea region gives us an increase of from 50 to 60 per cent. We can now tabulate the results of our study and compare them with these hypothetical figures.

	Per cent of increase indicated
Assessment and quota lists of 421 (uncorrected)	64
Island list	25
Assessment list with three quota lists (uncorrected)	40
Assessment list with three quota lists (corrected)	32
Three quota lists (uncorrected)	25
Quota list of 421–0 (uncorrected)	25
Rhodes	43½
Hellespontine, estimated at 95 T	30

Considering the insufficiency of our data, we are struck by the general agreement, not by the divergency of these figures. The

trend was decidedly downward. Just what was assessed and how much was collected in 421–0 we can estimate only approximately. Nevertheless, I think it safe to assert that fully 300 talents were substracted from the total of 425, and that at least a sum of 575 talents was assessed in 421.

In conclusion, the evidence presented above shows, I think, that the assessment of 421 returned to the pre-war scale, with here and there an increase and many names not found in the pre-war quota lists, bringing the total estimated tribute to a sum possibly a third higher than it had been in the days before the war. The allies were given their share in the blessings of peace. Would it be too much to say that the Aristidean tribute in its essentials had been restored?[1]

Allen B. West

Wheaton College
Norton, Mass.

[1] I need not remind the reader that the history of Athenian finances between the Peace of Nicias and the Sicilian expedition must now be completely rewritten, for we have deprived Athens of at least 300 talents of annual income. If the assessment remained in force four years, the loss was more than 1200 talents. It is quite probable, however, that the next assessment, possibly in 417, doubled the figures of 421, thus giving Athens an income from tribute of about 1200 talents yearly just before and during the Sicilian expedition. But the assessment of 417 merits separate treatment.

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TWO HELLENISTIC PORTRAITS IN THE METROPOLITAN MUSEUM

The Metropolitan Museum recently acquired a beautiful Hellenistic portrait statue of marble[1], about half life size[2] (Figs. 1–2). The head[3] (Figs. 3–4) when purchased was in a separate piece but was joined to the body with plaster. Though it was evident that the

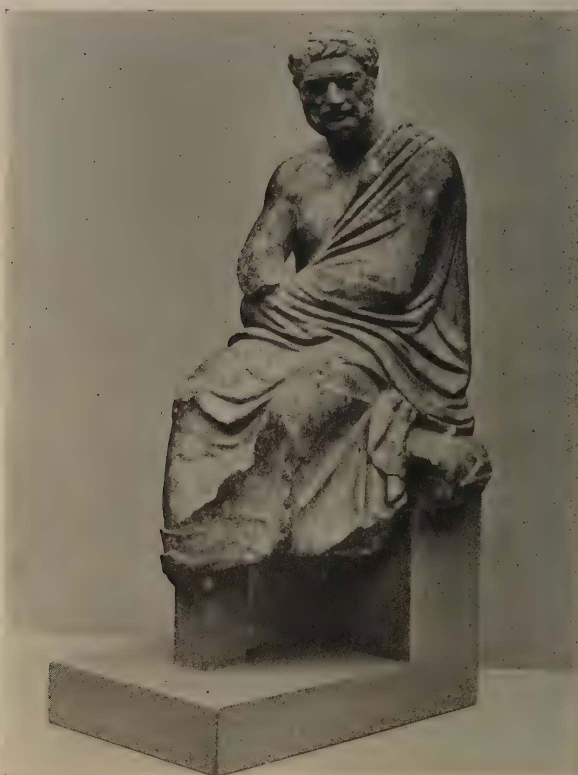

Figure 1. Marble Portrait Statue in the Metropolitan Museum of Art (With the Cast of a Head in the British Museum)

joining had not been done correctly, the neck being too long, the presumption, nevertheless, was that the two belonged together. For they were said to have been found in the same place, with no other fragments; and the workmanship, the marble, and the weathering in

[1] Briefly described in the *Museum Bulletin*, April, 1925, pp. 104–6.
[2] Total height with cast of British Museum head 19 in. (0.483 m.); height of body 16 in. (0.407 m.).
[3] Height 4 $^{11}/_{16}$ in. (0.109 m.).

both pieces are identical. Efforts to join the head to the body in a more satisfactory way were, however, futile. The neck always proved too long, and the head appeared a little too large for the figure. Further study showed that the two must actually have formed part of two separate statues; for each reproduces a well-known type —the head that of the philosopher Chrysippus—known to us in 13 other heads (ours makes the 14th), two torsos and a headless herm;[1] the body that of an unknown sage variously identified as Aristippus and Zeno, and known to us in four other examples.[2] The similarity of

FIGURE 2. MARBLE PORTRAIT STATUE IN THE METROPOLITAN MUSEUM OF ART

[1] Enumerated by Lippold, *Röm. Mitt.* 1918, p. 19, note 2; and Poulsen, *Ikonographische Miscellen*, pp. 7 ff. The heads are in the Capitoline Museum (3), the Vatican, the Villa Albani, the Naples Museum, the Uffizi, the Louvre, the British Museum (2), the Glyptothek in Munich, the Ny Carlsberg Glyptothek, Steensgaard, Denmark; the torsos in the Louvre and the Antiquarium Comunale, Rome; the herm in the National Museum, Athens.

[2] Five are enumerated by Lippold, *Griechische Porträtstatuen*, p. 86, note 3: in the British Museum; the Barracco Museum; the Vatican; present location unknown, once in Dresden (Prof. P. Herrmann informs me this is in the Albertinum and is listed in Hettner, *Antike Bildwerke zu Dresden* (4th ed.) No. 225, p. 111, and in Herrmann, *Verzeichniss der antiken Originalbildwerke* (1915), No. 194.); and with a dealer in Rome in 1911. The first four of these are figured and discussed by K. A. Esdaile, *J.H.S.* 1914, p. 48. Lippold's fifth is identical with ours, as a photograph kindly sent me by Dr. Arndt showed. The head had then not yet been added.

work and condition may be explained by the fact that they were companion statues, exposed to the same weathering conditions, either during their "lifetimes" or after burial. None of the extant Chrysippi have both body and head; and it is hard luck that ours should not have supplied this deficiency. Of the other figures, however, there is a complete example in the British Museum, the fine bronze statue from Brindisi[1] (Fig. 5), in which head and body are in one piece, so that there can be no doubt of their belonging together. Fortunately this bronze is of about the same dimensions as our statue,

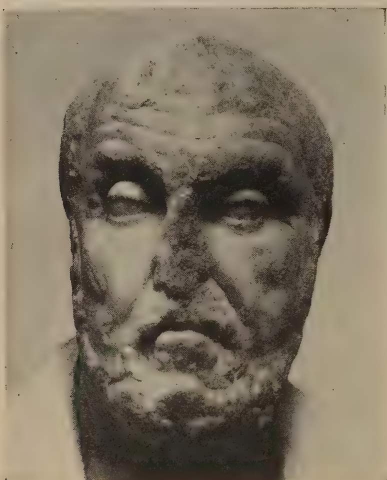

FIGURE 3. HEAD OF CHRYSIPPUS IN THE METROPOLITAN MUSEUM

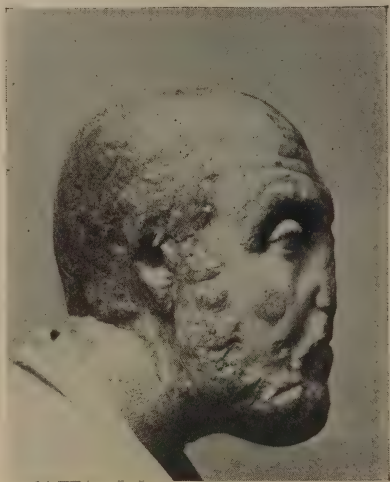

FIGURE 4. HEAD OF CHRYSIPPUS IN THE METROPOLITAN MUSEUM

so that we were able to add a cast of its head to our figure.[2] That it completes the composition much more satisfactorily than the Chrysippus head was immediately apparent. In size,[3] pose, and general design it fits admirably. From the same source we can supply in our imagination the other missing portions of our statue—the sandalled, crossed feet and the right arm with the hand brought up to the face. Enough remains of the right arm to show that it was bent at the elbow. But whether the hand was raised to the right cheek, as in the British Museum statue, or to the mantle below the chin, where there is an otherwise unexplained attachment, is uncertain. In the torso in the Barracco Museum[4] a similar attachment is

[1] No. 848; Cf. Esdaile, *J.H.S.* 1914, pls. II and III, and Walters, *Select Bronzes*, pl. LXV.

[2] I am greatly indebted to Mr. A. H. Smith of the British Museum for having this cast made for us.

[3] The neck was actually about $^1/_8$ in. too wide, though the size of the shoulders was identical; so that a slight readjustment was necessary.

[4] Cf. Esdaile, *op. cit.* pl. VI, and *Catalogue of the Museo Barracco*, pl. VI.

visible in the same place; and it is possible that we have here slight variations of detail. Our statue differs also a little in the arrangement of the folds from the British Museum example, approximating more nearly that of the Barracco Museum figure. From the latter we can, moreover, reconstruct the cushioned seat, of which only part of the pillow is preserved in our example. The cutting on the back of our figure is probably due to some circumstance of its exhibition.

To complete the Chrysippus we must imagine the head placed on a body of the type of the statues in the Louvre[1] and Antiquarium

FIGURE 5. BRONZE PORTRAIT STATUE IN THE BRITISH MUSEUM

Comunale (Figs. 6–7)[2], the neck pushed forward and sidewise in the manner of the British Museum bust[3] (Fig. 8)—an admirable character study of the eager, argumentative exponent of Stoic philosophy. Since Chrysippus died in 207 B.C. at the age of 73, the statue may well have been a contemporary portrait of the end of the third century.

The identification of the Chrysippus type is a nice example of ar-

[1] Cf. Bernoulli, *Griechische Ikonographie*, II, p. 159, fig. 18.
[2] Cf. Helbig, *Führer*[3], I, 1012.
[3] A. H. Smith, *Catalogue of Sculpture in the British Museum*, No. 1846. We have mounted our head on a plaster bust copied from that in the British Museum.

chaeólogical detective work. From a description by Cicero "Athenis statua est in Ceramico Chrysippi sedentis, porrecta manus" (*De finibus* I, 11, 39) the headless statue in the Louvre was tentatively identified as Chrysippus by Gercke [1] and Milchhoefer.[2] Since Chrysippus was a native of Soli a portrait head on coins of that city[3] was recognized as probably representing Chrysippus, and by comparison

FIGURE 6. STATUE OF CHRYSIPPUS IN THE ANTIQUARIUM COMUNALE ROME

with it, a series of heads in different Museums were associated with the same person. One of these heads, in the British Museum (Fig. 8), had the bust preserved, and this had mantle folds similar to those in the Louvre statue and the coin. So all evidence pointed in one direction; and yet some doubt remained, for the head on the coin might also have represented the astronomer Aratus, another distinguished citizen of Soli.[4] The final clue came through the discovery

[1] *Arch. Anz.*, 1890, V, p. 56 f.
[2] *Archäologische Studien Heinrich Brunn dargebracht*, pp. 37 ff.
[3] Cf. Bernoulli, *Griechische Ikonographie*, I, Münztaf. II, 11.
[4] Cf. Bernoulli, *Griechische Ikonographie*, II, pp. 145 ff.

by von Prott [1] of a headless herm in Athens with the same mantle folds and twisted neck as the Louvre statue, the British Museum head and the bust on the Soli coin; and with an inscription naming Chrysippus on its base! An ingenious supposition now became a certainty. The large number of extant Chrysippus heads is in line with Juvenal's remark (II, 4) "Plena omnia gypso Chrysippi in-

FIGURE 7. STATUE OF CHRYSIPPUS IN THE ANTIQUARIUM COMUNALE ROME

venies," and the well-known popularity of Chrysippus in his own and later times.

The identity of the other type of seated figure—of which we have a replica of the body—has not yet been discovered. Miss Esdaile [2] suggested Aristippus, from its general resemblance to the statue of Aristippus in the Palazzo Spada; [3] but our statue and the four other replicas form a homogeneous group different in too many important particulars from the Spada statue to warrant such identification.

[1] *Ath. Mitt.* XXVII, 1902, pp. 297 ff.
[2] *Op. cit.*, pp. 49 ff.
[3] Esdaile, *op. cit.*, pl. VII.

Lippold proposes the Stoic philosopher Zeno, disposing of the well-known Zeno portraits by referring them to the Epicurean of the same name.[1] But the urbane portrait of the British Museum bronze (Fig. 5) is surely not an appropriate picture of the harsh and passionate Zeno (σκληρὸς καὶ πάνυ θυμικός)[2] described by Diogenes Laertius[3] as "plain, bitter, with a stern and scowling countenance and a thin, ugly body"; and by Sidonius Apollinaris[4] as "with furrowed brow." The oxidation of the bronze of which Lippold speaks

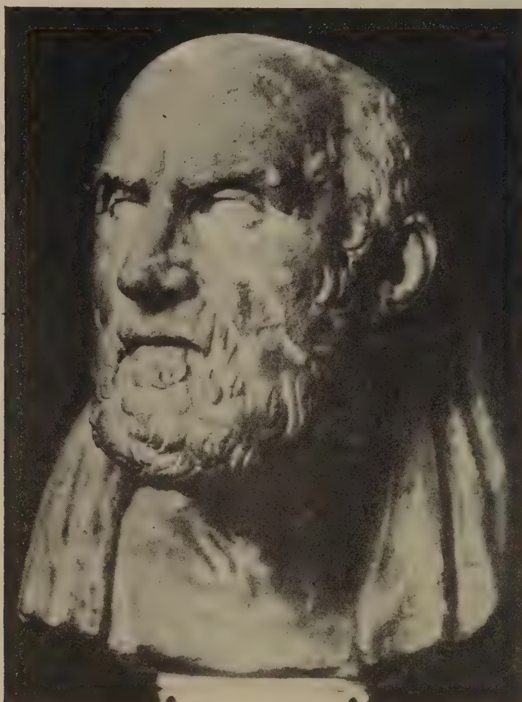

FIGURE 8. BUST OF CHRYSIPPUS IN THE BRITISH MUSEUM

can hardly be responsible for the lack of all these characteristics, which are so admirably brought out, on the other hand, in the other Zeno portraits. So that we must await a more convincing interpretation.

Though neither our head nor our body add anything substantially new to the archaeological knowledge of these two portrait types, the workmanship in both is so fine that artistically they rank high. Both are undoubtedly Hellenistic work, not Roman copies, and illustrate in a striking way the qualities of Hellenistic portraiture. The

[1] At first tentatively in his *Griechische Porträtstatuen*, pp. 86 f.; then more definitely in *Röm. Mitt.* 1918, pp. 19 ff.

[2] Athenaeus, II, 55 f. and XIII, 561c.

[3] VII, 1 and 16.

[4] *Epist.* IX, 9, 14.

beautifully modelled head with its fine skull, pensive eyes, and nervous mouth is a masterpiece both in conception and execution. It is not only a typical portrait of an intellectual, idealistic thinker, but it is at the same time a vivid character study of an individual human being. We gain an intimate acquaintance with the "quick and sagacious" [1] Chrysippus, who by his wide range of interests, [2] and his dialectic powers played an even greater part in popularizing the Stoic philosophy than its founder Zeno; and at the same time we obtain a realization of a typical Greek philosopher—quick-witted, analytical, absorbed in intellectual problems, and deriving therefrom a poise and idealistic quality transcending his own individual characteristics. How mistaken the former theory was that the Romans were the inventors of realistic portraiture a head such as this Chrysippus—modelled throughout in the fluid, sensitive manner characteristic of Greek work—sufficiently bears out.

The Hellenistic sculptor added considerable interest to his portraits by not confining his characterization to the head, but adding the whole figure. He was thus able to reveal his sitter's personality not merely by his features but in the attitude of the body. The quiet composure of our seated statue (Figs. 1–2) is admirably suited to the calm physiognomy of the British Museum head; very different from the fervent personality portrayed in the statue of Chrysippus, with its outstretched right arm and head eagerly bent forward.

The rendering of the drapery is noteworthy. The himation is arranged in a comparatively few, significant folds, beautifully composed with reference to a general design and yet bringing out in an admirable manner both the chief forms of the body and the heavy quality of the material. It is a treatment characteristic of the Hellenistic period. The seated statues of Posidippus and of "Menander" in the Vatican,[3] the statue signed by Zeuxis[4] and the bronze statuette of Hermarchus [5] in the Metropolitan Museum are other beautiful examples of such studies in drapery in which the former sense of design is combined with the later naturalism in a very happy fashion. They are among the most important original contributions made by the Hellenistic sculptor, standing out among the many adaptations of former styles.

Gisela M. A. Richter

Metropolitan Museum of Art
New York

[1] Cicero, *de Nat. Deor.* III, 10: homo sine dubio versutus, et callidus.
[2] Cicero, *Tusc.* I, 45: in omni historia curiosus.
[3] Hekler, *Greek and Roman Portraits*, p. 110a and b.
[4] Metropolitan Museum, *Handbook of the Classical Collection*, fig. 147. Lippold, in his *Griechische Porträtstatuen*, pp. 83 f., has tried to identify this statue with Cleanthus from the similarity of the drapery to that of the inscribed bust (Arndt-Bruckmann, *Griechische und römische Porträts*, pls. 505–6); but an examination of the original, where various views were possible, did not bear this out. The resemblance is slight.
[5] Richter, *Catalogue of Bronzes in the Metropolitan Museum*, No. 120.

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THE CALAURIAN AMPHICTYONY[1]

The steamer which plies between the Piraeus and Nauplia first stops at Aegina and then, about four hours out from the Piraeus, touches at Poros, the modern port of the island (of the same name) which in antiquity was called Calauria.

Calauria[2] lies off the coast of Troezenia in southeastern Argolis, being separated from the mainland by a strait which at its narrowest point is only about 400 yards in width. The island is a small one with a circuit of about sixteen miles and an area of about twelve square miles. Although so small in extent, yet Calauria played a prominent part in the history of Hellas, particularly in the early centuries of the "historical period."

Almost in the center of the island, at a distance of about two and a half miles northeast of the modern town of Poros, there is a plateau about 500 feet above sea level. Here on the saddle between two mountains was situated the hieron of Poseidon, in a place commanding an extensive view both to the north and to the south. On this site the excavations of the Swedish archaeologists, Wide and Kjellberg, in 1894 brought to light the remains of a temple, several stoae, and other buildings, together with the numerous remains of pottery, votive offerings, and other objects.[3] Around the sanctuary lay the ancient town of Calauria, and its harbor is situated a half hour's walk to the northeast, as the remains of ship-houses around the bay of Vajonia (the modern name) testify. (The present harbor of Poros, said to be one of the finest in Hellas, is in the southwestern part of the island.)

Perhaps Calauria is best known as the place where Demosthenes died. In 322 B.C. he had fled from Athens on the approach of Antipater and had sought refuge in the hieron of Poseidon.[4] But while this may be reckoned among the *clariora* associated with Calauria, the true importance of Calauria lies in the fact that around this hieron of Poseidon was formed and centered an amphictyony com-

[1] The most detailed, but certainly not the final, treatment of this subject is that of Wilamowitz, Die Amphiktionie von Kalaurea, in *Nachrichten v. d. k. Gesell. Wiss. zu Göttingen, Phil.-Hist. Kl.*, 1896, pp. 158–170. *V.* also Curtius, Der Seebund von Kalauria, in *Hermes*, X (1876), pp. 385–392; Volquardsen, in Bursian's *Jahresberichte*, 1876, p. 347 (a review of Curtius' article); the various histories for brief mention.

[2] For a description of Calauria and its ancient remains, *v.* Frazer, *Commentary on Pausanias*, II, 33, 2 (Vol. III, pp. 284 ff.); also next note.

[3] Sam Wide and L. Kjellberg, Ausgrabungen auf Kalaureia, in *Ath. Mitt.*, XX (1895), pp. 267–326.

[4] *Vitae* of Demosthenes; Plutarch, *Demosthenes*, XXIX; Strabo, VIII, 374; Paus., II, 33, 3.

posed, for the most part, of "dwellers around" the Argolic and Saronic gulfs.

Aside from a Hellenistic inscription, our only direct evidence for the existence of this amphictyony is a passage in Strabo (VIII, 374).[1] After saying that Troezen was sacred to Poseidon after whom it was once called Poseidonia, he mentions Calauria. I shall quote the important part of the passage: "Calauria is a little island having a circuit of about thirty stades.[2] Here there was a hieron of Poseidon, an inviolate place of refuge (or asylum). . . . Around this hieron there was an amphictyony of seven cities which participated in the sacrifice; they were Hermion, Epidaurus, Aegina, Athens, Prasiae, Nauplia,[3] Minyan Orchomenos. The Argives were wont to contribute through the Nauplians, and the Lacedaemonians through the Prasians."

The Hellenistic inscription[4] which I have mentioned is not preserved in its entirety, but enough remains to permit of the restoration of several important words, especially "hieromnamones" and "amphictyones" or "amphictyony." This inscription is important because it shows that the amphictyony was in existence in the third century B.C.

We infer that the amphictyony did not exist in the time of Strabo (first century), for Strabo uses, not the present, but the past tense in speaking of it. "There *was* an amphictyony," he says. Whether or not the amphictyony of the third century was a survival or a revival of the older league, it is impossible to say. There are advocates for both sides of this question.[5] It must be confessed that, if the amphictyony did exist in the fifth and fourth centuries, it is strange that no mention of it occurs in the comparatively extensive literature of the classical period. In the opinion of Wilamowitz,[6] the existence of the amphictyony with Athens as a member is unthinkable at the time of the exile and death of Demosthenes at Calauria in 322 B.C. He says, the Demosthenian letter which discusses the bond between Athens and Troezen and the sanctity of the asylum could not have failed to mention Athens as a guarantor

[1] The first part of the passage is from p. 373; his reference to the amphictyony is on p. 374. Niese (*Rh. Mus.*, XXXII, p. 306) thinks that Strabo derived this note from Eratosthenes; but *v.* Wilamowitz, *loc. cit.*, p. 169.

[2] The circuit of the island is nearer 140 stades. The same mistake occurs in VIII, 369. Wilamowitz (p. 163) does not believe that Strabo and Pausanias ever visited the island. (Pausanias mentions the hieron of Poseidon on the island, II, 33, 3.)

[3] For convenience I have written *Nauplia* and *Prasiae*, although Strabo, in the case of these two members, has given the names of the people, Ναυπλιεῖς and Πρασιεῖς.

[4] *I.G.* IV, 842, p. 171; Wilamowitz, p. 160; Beloch, *Griechische Geschichte* [2], I, 1, p. 330.

[5] For instance, Wilamowitz believes that an interruption occurred; Ure (*The Origin of Tyranny*, p. 330) believes that it "lasted on as a religious body through classical times"; *v.* also n. 1, to p. 160 *supra*.

[6] Wilamowitz, p. 161 and n. 2.

of the asylum, as Athens would have been, had she been still a member of the Calaurian Amphictyony.

However, the *argumentum ex silentio* cannot be considered conclusive. Perhaps we have a hint of the survival of this amphictyony in the fact that some Athenian families sought refuge in Troezen during the Persian Wars,[1] as well as in the flight of Demosthenes to Calauria. On the other hand, one may argue that the close bond between Athens and Troezen was a heritage from an earlier period when Athens was a member of the amphictyony,[2] and that Demosthenes fled to Calauria simply because it was famed for its inviolate asylum. Then, too, the fact that the hieron received several buildings during the fifth and fourth centuries may merely show that the cult of Poseidon continued to be maintained or that the city of the Calaurians and the cult continued to thrive and grow.

But it is really of little moment whether we believe that the amphictyony *survived* through the classical period, or whether we believe that it was *revived* in the third century. At most, it seems to me, it could have had only a religious significance in the fifth and following centuries.

As I have intimated, and as almost all scholars agree, the great period of the Calaurian Amphictyony—the period when this league was probably more than a religious association—was undoubtedly some time before the fifth century. I should be inclined to date the great period of the Amphictyony in the eighth century. Many considerations lead to this hypothesis.

(1) First, I should mention in this connection the tradition that Calauria was once called *Eirene* (Peace).[3] This tradition doubtless arose from the fact that a truce was declared among the members while they were assembling at the hieron in Calauria for the festival of the god.[4] Time is required for the growth of such a tradition, and hence the truces must have been declared long before this tradition became current. This tradition appears to be credited to Aristotle, but it is obviously much older.

(2) Aegina must have joined the amphictyony before 457 B.C., the date when the island was subjugated by Athens.[5]

(3) In fact, the entry of Aegina, and also of Athens, into the league could hardly have been later than the seventh century. During the sixth century these two states, already having become bitter

[1] Hdt., VIII, 41; Plut., *Themistokles*, 10.
[2] It is interesting to note that Cavaignac (*Histoire de l'Antiquité*, I, 2, sec. 134, p. 236, and sec. 325, p. 366) believes that Theseus and the "Theseus saga" were introduced into Attica from Troezen, as a result of Athens' membership in this amphictyony, about the seventh century.
[3] Aristotle in Plut., *Quaest. Gr.*, 19; Harpokration, *s.v.* Εἰρήνη; Photius, *s.v.* Καλαύρεια.
[4] *Cf.* Wilamowitz, p. 168.
[5] Thuc., I, 105, 108; *v.* also Beloch, II, 1, pp. 167, 170, and 2, p. 200.

rivals and enemies, appear to have been engaged in periodic warfare with each other.[1]

(4) The last sentence in the passage quoted from Strabo is significant: "The Argives were wont to contribute (that is, be represented) through the Nauplians, the Lacedaemonians through the Prasians."[2] This implies that Argos and Sparta were not, to use a modern expression, "charter members" of the amphictyony. Obviously the entry of Argos and Sparta into the amphictyony is to be dated after their conquests of Nauplia and Prasiae respectively. The expansion really began in the seventh century, and the Argive conquest of Nauplia and of the greater part of Argolis probably coincides with the reign of Pheidon or the period of Argive hegemony in the Peloponnesus, that is, in the first half of the seventh century. This would indicate that the amphictyony was in existence at least as early as the eighth century B.C.

(5) The presence of Epidaurus in the list of Strabo may likewise point to this early date for the amphictyony, because the rise of Argos in the beginning of the seventh century may have brought an end to the independence of Epidaurus also. Or if Argos did not effect the conquest of Epidauria, certainly the great period of Epidaurus was before Corinth became a leading commercial state.[3]

(6) Minyan Orchomenos also must have joined the league at least as early as the eighth century.[4] Obviously this city could have been a member of the amphictyony only so long as she held the sea-port Larymna or Anthedon.[5] But, according to Beloch, Orchomenos was shut off from the sea in the seventh century, for Copae which had belonged to Orchomenos in the eighth century has become a Boeotian city in the "Catalogue."[6]

(7) Another indication of an early date for the existence of the amphictyony is given by Busolt.[7] He argues plausibly enough that the league must have arisen before the rise of Corinth and of Chalcis

[1] *Cf.* Hdt. V, 82 ff., and commentaries on these chapters by How and Wells and by Macan.

[2] συνετέλουν might be freely translated "were represented (in the name of, or through)."

Prasiae may not have come into the possession of Sparta until the sixth century, but apparently the Prasians had come under the sway of Argos in the seventh; *cf.* Beloch, I, 1, p. 204, and p. 335 and notes 1 and 2.

[3] According to Herodotus (I, 82), Argos had possession of the entire east coast of the Peloponnesus. *Cf.* Beloch, I, 1, pp. 332 ff., Ure, *loc. cit.*, pp. 176–7. At any rate, Epidaurus, early a rival of Corinth, was conquered by Periander in the early part of the sixth century; Hdt. III, 52; *cf.* Beloch, I, 1, p. 362.

[4] So says Beloch (I, 1, pp. 209, n. 3; 329; 330, n. 1).

[5] Larymna was the port of Orchomenos; *v.* W. A. Oldfather, Studies in the History and Topography of Lokris, in *A.J.A.*, 1916, pp. 32 ff. Bulle (*Orchomenos*, 1907) mentions two roads, connecting Orchomenos with Anthedon, which he thinks follow the courses of ancient ones. (I have not been able to verify this reference.) In this connection, I should mention the tradition that Calauria was also called Anthedonia; Aristotle in Plut., *Quaest. Gr.*, 19; *cf.* Wilamowitz, p. 167.

[6] Beloch, I, 1, p. 209, n. 3. *Iliad*, II, 502.

[7] Busolt, *Griechische Geschichte* (2), I, sec. 6, p. 190.

and Eretria. These cities had come to the fore as commercial states and had become leaders in the colonial movement by the end of the eighth century.

(8) Perhaps we have a still more definite *terminus ante quem* in the date of the *synoikismos* of Troezen. Scholars have wondered why Troezen is not listed among the members of the amphictyony formed around a hieron on an island which not only was considered a part of Troezenia,[1] but also lies, one might say, before the very door of Troezen. But Frickenhaus and Müller [2] have shown that the earliest finds on the site of Troezen are to be dated in the so-called "Geometric Age," and hence that Troezen did not exist until this period. Incidentally, they point out the fact that Troezen is the only important city of eastern Argolis which was not in existence in the "*mykenische Zeit*," that is, the Bronze Age. They have explained the absence of Troezen from Strabo's list by the assumption that the Calaurian Amphictyony was formed at some time prior to the *synoikismos* of Troezen, or "*in die mykenische oder frühgeometrische Zeit*." [3]

Several others have also advanced the theory that this amphictyony originated "before the Dorian Invasion," or in the latter part of the Bronze Age,[4] but few have given reasons for their belief and in many cases have followed some previous authority such as K. O. Müller.[5] It is impossible to say with any degree of certainty, for lack of evidence, just when the amphictyony did originate. But I think that we may plausibly assign its formation to the last period of the Bronze Age, that is, to the Late Helladic Period (ca. 1400–1100 B.C.).

A clue to the date of the origin of this amphictyony may be given by archaeology. The earliest finds from the hieron of Poseidon at Calauria do not antedate 1400 B.C. These finds are described as "*mykenisch*" and "*jüngermykenisch*." [6] Of course, the fact that the hieron and cult of Poseidon existed at Calauria in the Late Helladic Period does not prove that the amphictyony was formed in this period. But, on the other hand, we cannot think of *amphictyones* without a hieron for them to "dwell around"; the amphictyony cannot have existed before the cult or hieron around which it was

[1] Strabo, VIII, 373; Paus., II, 33, 2. Calauria was autonomous for awhile; *v.* Wilamowitz, p. 161 and n. 3, p. 162.

[2] Aus der Argolis, in *Ath. Mitt.*, 1911, pp. 21–38; esp. pp. 32, 33, 37.

[3] *Ibid.*, p. 38.

[4] Bolte, in Pauly-Wissowa, *s.v. Hermione;* Furtwängler, *Aegina; das Heiligtum der Aphaia*, p. 471; Macan, on Hdt. VIII, 46; Wide and Kjellberg, in *Ath. Mitt.*, 1895, p. 287. *Cf.* Meyer, II, sec. 128 (the amphictyony may be a survival of an old *Seeverbindung*).

[5] K. O. Müller, *Aegineticorum liber* (Berlin, 1817), p. 35. It is natural that reasons or evidence have not been adduced, for the various scholars merely mentioned the amphictyony incidentally.

[6] *Ath. Mitt.*, 1895, pp. 267 ff.; Furtwängler, *loc. cit.*, p. 471.

centered. Therefore, we may tentatively take the date 1400 B.C.—the beginning of the Late Helladic Period—as the *terminus post quem* for the establishment of the Calaurian Amphictyony.

Assuming that the amphictyony was formed in the same period as the hieron about which it was centered,—in the Late Helladic Period,—the question naturally arises: "What people were responsible for the establishment of this hieron and (subsequently perhaps) of this amphictyony?"

It is to be noted that the amphictyony was formed around the hieron of Poseidon. Now Poseidon (or, as he was called in the "Arcadian" dialect, Posoidan)[1] appears to have been the chief, or at least a leading, deity of the Middle Helladic people, the "Minyans," as I have labelled the *Träger* of the Middle Helladic civilization in Central and Southern Hellas.[2]

Of course, the Middle Helladic peoples were not one homogeneous folk. But I believe that the inhabitants of Central and Southern Hellas in the Middle Helladic Period (ca. 2000–1400 B.C.), for the most part, had the same general culture and worshipped Poseidon. Doubtless many of them spoke Aeolic and kindred dialects, for example, "Arcadian," and, of course, many were ethnically as well as culturally related.[3]

Hence the fact that the amphictyony was formed around a hieron of Poseidon may indicate that it originated with these peoples whose leading cult appears to have been that of Poseidon. Ordinarily one would expect this cult and hieron to be established during the "régime" of the "Minyans", in the Middle Helladic Period. For in the Late Helladic Period, as a result of the "Achaean Invasion" about 1400 B.C.,[4] the cult of Poseidon seems to have declined in importance or, as the traditions inform us, Poseidon lost Aegina to Zeus, Argos to Hera, Attica to Athena, and Pytho to Apollo.[5]

However, archaeology informs us that the hieron was not established until the Late Helladic Period. Hence we must seek an explanation of this phenomenon, the establishment of a seemingly typical Middle Helladic cult in the Late Helladic Period. Some one may object to my making a problem of this and say that it is per-

[1] *I.G.*, V, fasc. 2, nos. 46 ff., 271 (from Arcadia); *cf.* Farnell, *The Cults of the Greek States*, IV, pp. 86–87, and n. 64.

[2] *V.* J. P. Harland, The Peloponnesos in the Bronze Age (in *Harvard Studies in Classical Philology*, XXXIV (1923), pp. 1–62), pp. 20 ff. (Will be referred to as "*P.B.A.*") Reasons for the adoption of the "label"—"Minyans"—on pp. 19–20. My "Minyans" are not to be confused or identified with the Minyae of Orchomenos, although the latter may be grouped with the "Minyans," provided that the Middle Helladic inhabitants of Orchomenos are thought of.

[3] *P.B.A.* pp. 53–56; *v.* previous note.

[4] *P.B.A.*, pp. 30 ff.

[5] Pythaenetus in Schol. to Pind., *Isth.*, VIII, 92; Plut., *Quaest. conviv.*, IX, 6, p. 741; Paus., I, 24, 5; 26, 5; II, 15, 5; 22, 4; X, 5, 6; Poseidon lost Corinth to Helios (Paus., II, 1, 6); *cf.* also Strabo, VIII, 373.

fectly natural for states combining for the purposes of transmarine trade to select Poseidon as their patron deity. But we are hardly justified in assuming a practical aim for an amphictyony at its beginning. An amphictyony was purely a religious association in its origin. The political and economic aspects developed later.

I believe that the cult and hieron of Poseidon at Calauria was established and subsequently made the center of an amphictyony solely because this god was the leading deity of the "dwellers around." I believe that the founders of the hieron and of the amphictyony were of the old Middle Helladic stock, a surviving element of the pre-"Achaean" peoples in Southern Hellas. This belief or hypothesis is based on the following evidence.

The "Achaean Invasion" (ca. 1400 B.C.) appears to have brought an end to the "régime" of the Middle Helladic "Minyans" in the greater part of the Peloponnesus, but not in all parts of this "isle of Pelops." For instance, the "Minyans" in mountain-hemmed Arcadia were able to resist further encroachments on the part of the invaders of Northwest Hellenic stock, for they were able to preserve their dialect and cult down into the classical period.[1] The same is true, to a large extent, of the "Minyans" who lived in, or were driven into, the peninsula of Mani (where Taenaron is situated), and also in Triphylia.[2]

But doubtless the pre-"Achaean" population was able to resist the invaders and to maintain themselves in many other places, especially in the extreme parts of a region. For example, I believe that the peoples who inhabited many of the towns on the Argolic and Saronic gulfs in the Late Helladic Period belong to this pre-"Achaean" stratum. In support of this theory, I submit the following points as evidence:

(1) According to the traditions and the statements of ancient writers, it was generally believed in antiquity that there were non-Dorian[3] elements in the populations of several Argolid and neighboring towns. For instance, there was said to be an Ionic stratum of people in Cynouria,[4] the region in which Prasiae is to be localized, and the same was said to be true of Troezen[5] and Epidaurus.[6]

Furthermore, the inhabitants of Hermione (and of Asine which is not far from Nauplia) claimed to be Dryopians.[7] Now the Dryo-

[1] Beloch, I, 1, pp. 88, 90; *v.* Dialect Chart at back of Beloch, I, 2; and Buck, *Greek Dialects* (1910), Pl. V. *Cf. P.B.A.*, pp. 18–19.

[2] *Taenaron: I.G.*, V, fasc. 1, pp. 220 ff.; Strabo, VIII, 363; Paus. III, 25, 4; Farnell, IV, p. 41. *Triphylia:* Beloch, *ibid.* and Dialect Chart; also p. 90, n. 1, and p. 91.

[3] Or, in other words, non-"Achaean" *v.* n. 1 to p. 168.

[4] Hdt., VIII, 73, 3.

[5] Busolt, I, sec. 7, p. 218; Meyer, *Geschichte des Altertums*, II, sec. 128.

[6] Aristotle in Strabo, VIII, 374.

[7] Hdt., VIII, 43; 73, 2; Paus., IV, 8, 3; 34, 6. *Cf.* Beloch, I, 1, p. 91. There are even traditions which indicate a relationship between Dryopians and "Arcadians" (my "Minyans"): *v.* Beloch, I, 2, p. 106.

pians appear to be of non-Dorian stock and to have entered the Peloponnesus before the Dorians and the "Achaeans."[1] Athens, of course, claimed to be non-Dorian, and Orchomenos probably preserved its Middle Helladic or "Minyan" character, for Boeotia was never completely "Doricized." There was rather a fusion of the two peoples and, besides, Orchomenos held aloof from Thebes and the Boeotian League for centuries. Not until the sixth or possibly the fifth century did Orchomenos enter the Boeotian League.[2] Thus, we find evidence of a non-Dorian element in the populations of almost all the cities listed as members of the Calaurian Amphictyony.

(2) Next, I shall call attention to the fact that cults of Poseidon are known to have existed and to have been preserved down through the classical period in Nauplia, Hermione, Troezen, Epidaurus, and Athens.[3] As for Aegina, not only the tradition that Poseidon was forced to give up the island to Zeus[4] implies the existence of such a cult on the island at some early time, but there is epigraphical evidence[5] of the existence of a cult of Poseidon in Aegina. I might mention here that there was a flourishing settlement on the island in the Middle Helladic Period.[6] It is very probable that there was a cult of Poseidon at Orchomenos, for Orchomenians appear to have participated in the festival of this god at his great cult-center at Onchestus[7] which is less than fifteen miles from Orchomenos. The site of Prasiae has not yet been discovered.[8]

(If, as I believe, the cult of Damia and Auxesia, goddesses of fructification, is older in origin than the Late Helladic Period, then we have possibly another indication of a pre-"Achaean" element in several of the states in question, for this cult is found in Troezen, Epidaurus, Aegina, and Attica.[9] However, this is very weak evidence and based on mere hypothesis; the cult may have spread as a result of the Calaurian Amphictyony.)

(3) Finally, it is to be noted that all the cities in the list of Strabo (with the exception of Prasiae which has not been localized) are known to have been inhabited in the Late Helladic Period.[10]

[1] *V.* n. 1 to p. 168 *infra;* also *P.B.A.*, p. 35 and n. 1; Beloch, I, 1, p. 91; Busolt, I, sec. 7, p. 209. *Cf.* Hdt. I, 56; VIII, 31.

[2] Beloch, I, 1, p. 209 and n. 3.

[3] Farnell, *Cults of the Greek States*, IV, pp. 79–84; Wide, *De sacris Troezeniorum, Hermionensium, Epidauriorum* (1888), pp. 9 ff.; Cavvadias, *Fouilles d'Épidaure*, 55; Brit. Mus. Catalogue of Coins, "*Peloponnese*", p. 159. *V.* also Strabo, VIII, 373; Paus., II, 38, 2; 34, 10; 35, 1; I, 26, 5; Frazer, Vol. II, pp. 339 ff.

[4] Pythaenetus in Schol. to Pind. *Isth.* VIII, 92; Plut., *Quaest. conviv.*, IX, 6.

[5] *I. G.* IV. nos. 34–36.

[6] *V.* J. P. Harland, *Prehistoric Aigina*, chap. I, sec. 3.

[7] *Cf.* Paus., IX, 36, 4; 37, 1; Farnell, *op. cit.*, IV, p. 83. The cult of Poseidon appears to have been native to Thessaly and Boeotia (*v.* Farnell, IV, pp. 14–16; 76–79).

[8] *Ath. Mitt.*, 1911, p. 37.

[9] *V.* Frazer on Paus., II, 30, 4 (Vol. III, p. 206 ff.); Hdt., V, 82–83; Paus., II, 32, 2. *Cf.* Wide, *op. cit.*

[10] Fimmen, *Die Kretisch-mykenische Kultur* (1921), pp. 5, 8, 9, 13.

In the light of the foregoing evidence, I believe that we are justified in assuming that the cult and hieron of Poseidon at Calauria (and subsequently the amphictyony) were established in the Late Helladic Period by peoples belonging to the old Middle Helladic or pre-"Achaean" stratum in Hellas. All the requirements for the acceptance of this theory are satisfied: the different cities were inhabited in the Late Helladic Period, practically all of them show traces in their traditions of a non-Dorian [1] element in their populations, and all apparently had cults of Poseidon.

The amphictyony was not necessarily formed at the same time as the establishment of the hieron at Calauria, but I should think that the association of the "dwellers around" would have formed soon afterwards, probably in the same century. The Calaurian Amphictyony probably was primarily a league of sea-states on the Argolic and Saronic gulfs, which were united by sea-travel and the common worship of Poseidon. Orchomenos, whose early wealth and trade are attested by the Epos [2] and by archaeology,[3] may also have joined the league in the Bronze Age, but hardly as early as the true "dwellers around" the Argolic and Saronic gulfs.

I believe that the motive which led these people to form the amphictyony was essentially a religious one. It is hardly probable that the main object of the league at this early date—assuming that it was founded in the Late Helladic Period—was the suppression of piracy,[4] although the trading activities of the Aegean peoples in the Bronze Age must not be underestimated. Undoubtedly the mutual protection afforded by membership in the amphictyony tended from the start to suppress piracy in a limited area, and probably, as time went on, the scope of the league's activities broadened considerably.

The lack of evidence precludes the possibility of sketching the history of the Calaurian Amphictyony from its inception till its dissolution or end, but perhaps a few general remarks may be apposite. The traditional "Dorian Invasion"[5] probably had no effect—at least no immediate effect—on the activities and welfare of the amphictyony. Then followed the so-called "Dark Age," a period which is called "dark" because so little light is shed upon it

[1] I believe that the "Achaeans" spoke a dialect of the Northwest Dialect Group, —I have called it "Proto-Doric",—and that the traditional "Dorian Invasion" was but the last wave of the great migrations of Northwest Hellenic peoples, which began with the "Achaean Invasion" about 1400 B.C. (*Cf. P.B.A.*, pp. 41 ff.) Hence "Achaeans" are practically Dorians—at least they both belonged, so I believe, to the Northwest Dialect Group.

[2] *Iliad*, IX, 381.

[3] Fimmen, p. 5, *s.v. Orchomenos*.

[4] *Cf.* E. M. Walker, in *Encycl. Brit.*, *s.v. Aegina*, p. 252: "The League of Calauria . . . was probably an organization of states which were still Mycenaean, for the suppression of the piracy which had sprung up in the Aegean as a result of the decay of the naval suppremacy of Mycenaean princes."

[5] *P.B.A.*, pp. 49–51.

by the scanty evidence from this early period. A decadent period it probably was in the field of art, but it is possible that this artistic decline was counterbalanced by a rise or advance along commercial and political lines. After the emigrations from Hellas proper to Asia Minor as a result of the displacement of peoples in the Late Helladic Period, many cities doubtless began to develop commercially and to forge ahead of their less progressive neighbors. Certainly this is true of Aegina, for how else are we to explain the tradition, found in Hesiod's *Eoeae*, that the Aeginetans were the first to invent sailing-ships? [1]

In the early centuries of the Iron Age—for instance, from the tenth to the eighth centuries—the Calaurian Amphictyony could hardly have failed to acquire commercial and political mportance. Possibly it was at the height of its power or influence in the eighth century, when it had probably become more of a commercial and political sea-league than a religious association. The very fact that Sparta and Argos sought and eventually obtained admittance into this amphictyony shows how influential it was in Southern Hellas in the eighth or seventh century.[2]

It is to be noted, in this connection, that Proto-Corinthian and Corinthian (*altkorinthisch*) pottery was found in considerable quantities at the hieron at Calauria.[3] This would seem to indicate that the hieron was especially frequented in the eighth and seventh centuries. So, the archaeological evidence supports, or at least is in accord with, the hypothesis that the *floruit* of the league was in this early period. Perhaps a warning may be apropos here. One should not expect the great period of the league to be synchronous with the most flourishing period of the hieron. The hieron was probably most prosperous and most richly endowed with buildings in the fourth century,[4] but surely no one would deduce therefrom that the Calaurian Amphictyony was at its height in this century. It should be obvious that the power or importance of a league in the eighth, or even early seventh, century cannot very well be reflected in the material remains at its meeting-place or cult-center. Permanent stone temples were rare in Hellas before the middle of the seventh century.[5] The earliest temple at Calauria belongs to the sixth century,[6] when the amphictyony had apparently ceased to function, at least in its original form.

The reason why we hear so little of this amphictyony has been

[1] Hesiod, frg. 76 (Rzach, 1902).
[2] *V.* p. 163 and n. 2, *supra*.
[3] Wide and Kjellberg, in *Ath. Mitt.*, 1895, pp. 318 ff.
[4] *Ibid.*, pp. 277 ff.
[5] The extant temple of Hera at Olympia, generally considered to be the earliest temple in Hellas, is more probably to be dated in the seventh than in the eighth century B. C.
[6] *Ath. Mitt.*, 1895, p. 273.

indirectly explained. The political importance of this league had reached its high-water mark and had ebbed over a century before the great period of Hellenic literature. The amphictyony, shorn of practically all of its political and economic significance, may have continued to exist as a religious association down into and even through the classical period. In the sixth century a Doric temple was built at the hieron of Poseidon and in the fifth and fourth centuries stoae and other buildings were erected at this Calaurian sanctuary.[1] However, these building operations may merely show that the hieron of Poseidon and its asylum continued to be frequented and used, and not that an amphictyony, even in a modified form, continued to exist.

To account for the decline and probable dissolution of the Calaurian Amphictyony would virtually require a sketch of Hellenic history from the eighth to the sixth centuries, and obviously this is not the place for such an "outline of history." Probably not one but many causes and factors contributed to the decline of this amphictyony (or to the return to its original status of a purely religious league). I shall briefly present a number of possible causes, any or all of which may well have been responsible for the decline of the Calaurian Amphictyony:

(1) When Orchomenos lost Copae and Larymna or Anthedon and was shut off from the sea, the amphictyony lost one member.

(2) The rise of Argos and of Sparta, resulting in the conquests of Nauplia and Prasiae, naturally altered the original form of the organization.

(3) Possibly an amphictyony, formed around the hieron of Apollo Pythaeus[2] and sponsored by Argos, may have affected the Calaurian league. Both Aegina and Epidaurus as well as cities in Argolis may have belonged to it.[3]

(4) The rise of Corinth as a commercial state must have seriously affected Epidaurus.

(5) The rise of Chalcis and Eretria might be mentioned in this connection.

(6) The "War of the Lelantine Plain," which probably took place in the seventh century, must have involved some members of the

[1] *Ath. Mitt.*, 1895, pp. 274 ff. (stoa of the fifth century); pp. 277 ff. (other buildings).

[2] Curtius (*v.* n. 1 to p. 160, *supra*) believed that the Calaurian Amphictyony was formed as a "*Gegenbund*" to that of Apollo Pythaeus. But Beloch (I, 1, p. 205, n. 1) is opposed to the idea of the existence of an amphictyony formed about a hieron of Apollo Pythaeus at Argos.

[3] From Hdt. VI, 92 and Thuc. V, 53, one might infer that Argos presided over, or was a prominent member of, a religious league centered about a cult of Apollo Pythaeus. May Argos have formed a religious league to rival the Calaurian Amphictyony, in addition to gaining, or before she gained, admittance into the latter? However, *v.* the previous note and Beloch, *loc. cit.*

Amphictyony. Aegina seems to have waged war against Samos,[1] and Athens was probably on the other side.

(7) Internal dissension. Athens and Aegina became inveterate enemies and were at war with each other almost continually during the sixth century, and possibly in the seventh also.[2]

All in all, it is not surprising that the Calaurian Amphictyony, as a political and commercial league, came to an end. In the first place, it was a union of Hellenes and it was not their nature to remain long united with each other. Furthermore, as time went on, the different members began to develop their own individual characteristics and especial interests. It is even possible that all the members originally spoke similar or related dialects, but later on we find one speaking Ionic and another Doric. However, difference in dialect must not be emphasized. Race and dialect have little weight when politics and commercial interests are involved. Ionian Athens was not averse to an alliance with Dorian Argos and, of course, the enmity between Athens and Sparta was due, not to a difference in race or dialect, but to differences in interests and policy. Conflicting interests and policies doubtless had a disastrous effect on the Calaurian Amphictyony also.

The object of this paper was to determine, if possible, the period, in which this amphictyony was formed. I would say, in conclusion, that the date of the origin of the Calaurian Amphictyony will probably always remain a matter of conjecture. Archaeology shows that the cult and hieron of Poseidon at Calauria are very old—as old as the Late Helladic Period—and perhaps the amphictyony goes back to this period. But we have no evidence, for it is obvious that the fact that the cult existed in the Late Helladic Period does not prove that the amphictyony was formed in this same period. However, I believe that the nucleus of the Calaurian Amphictyony is to be found in a religious union of Helladic peoples of pre-"Achaean" stock, who were "dwellers around" the Argolic and Saronic gulfs, in the Late Helladic Period.

J. Penrose Harland

University of Cincinnati

[1] The "War of the Lelantine Plain" was apparently a Pan-Hellenic affair (Thuc. I, 15). Aegina had been attacked by the Samians in the reign of Amphicrates (possibly in the seventh century) (Hdt., III, 59). Possibly this occurred at the time of the Second Messenian War, when Samos is said to have helped the Spartans (Hdt., III, 47).

[2] *V.* n. 1 on p. 163.

A ROMAN EAGLE IN ROCHESTER

In the year 1882 a small bronze eagle was presented to a friend in Rochester, N. Y., by an American missionary to Syria. In reply to inquiries from the recipient of the gift, the donor later sent a letter which is still preserved, reading in part as follows: "I am

Figure 1. The Rochester Eagle—Front View

sorry to be able to afford you so little information in regard to the bronze eagle. It is impossible that it should be a counterfeit, as it was found in a place never visited by European or American travellers. It was presented to me together with various ancient coins in 1868, a little before leaving Turkey, by my friend the American Protestant physician of Aintab, Dr. Nersis, who told me that he had obtained it, together with two or three of the coins, from one of his patients, a peasant who had found it while cultivating his vineyard, a few miles northeast of Aintab, near Baba Doluk, or Dolik. This is the highest hill or mountain in sight from Aintab on the northeast, three hours' ride. Baba means 'father' and is a term frequently applied to hills which are sites of ancient cities or fortified places. I am not now in the possession of a classical dictionary or any large cyclopaedia for reference, but I recollect having satisfactorily

identified Baba Dolik[1] with the ancient Dolichaeum, a fortified place sometimes mentioned in ancient history."

The original Rochester owner, a man of wide culture, apparently came to the conclusion that he was in possession not only of an eagle of a Roman legion, but actually of one of those lost by Crassus as a result of the drastic defeat suffered at the hands of the Parthians in the battle of Carrhae, 53 B.C. He had the eagle mounted on a staff in imitation of a Roman standard, and to the staff he attached a brass plate inscribed with the famous verses of Horace, *Carm.* IV,

FIGURE 2. THE ROCHESTER EAGLE—REAR VIEW

15, 6–9, referring to Augustus and the return of the standards on the occasion of his diplomatic victory over the Parthians in 20 B.C.,

"Et signa nostro restituit Iovi
Derepta Parthorum superbis
Postibus."

That the relic was once the eagle of a Roman standard I see no reason to doubt, but that it was one of the Crassus eagles is not probable. Doliche is approximately one hundred miles west of Carrhae. The battle was fought in the plain some thirty miles to the south of Carrhae, but Crassus with the majority of his troops escaped the night after the battle to the city itself. Later he at-

[1] The *Encyclopaedia Britannica* calls the place "Duluk" and gives its position as two hours northwest of Aintab. The modern village is on, or near, the site of the ancient Doliche (Dolichaeum).

tempted to make his way northward by night marches into the mountainous country of Armenia out of the reach of the terrible Parthian cavalry, but his guide proved faithless and the army was overtaken and surrounded by the enemy. The Roman general was treacherously slain in a conference with Surena, the Parthian commander, and his head was cut off and sent to the king. The Roman troops were largely killed or captured. Of forty thousand men not more than ten thousand, in small and scattered detachments, eventually escaped into Syria. It is impossible to determine the exact site[1] of the final disaster to Crassus and his army, but certainly Doliche was far to the west. Yet Doliche was on the line of escape into Syria and one of the scattered bands may there have lost our eagle, or concealed it when in despair of eluding the foe. A dying *aquilifer*, Bruttius by name, buried his eagle in the battle of the Thrasymene Lake,[2] and in the disastrous defeat of Quintilius Varus in Germany one of the three legionary eagles was saved from capture by its bearer, who tore the eagle from its staff, concealed it in his girdle, and hid himself in a swamp.[3] On the other hand, there is no allusion in ancient sources to a similar escape from capture in the retreat from Carrhae. In 104 B.C. Marius had made the eagle the sole symbol of the legion,[4] and from that time until the summer of 53 B.C. no eagle had been lost. In the latter year Roman eagles had become the trophies of the Parthians in the east, and a Gallic tribe in the west.[5] These prophetic disasters, particularly that of Crassus, produced a profound and gloomy impression on the Roman people. In spite of the preoccupation caused by the civil wars soon to follow, the situation was looked upon as intolerable, and great was the rejoicing thirty-three years later on the return of the standards lost to the Parthians, even though the triumph of Augustus was diplomatic in character and only potentially due to military force. Now it is a curious feature of the story that we are not told the number of the eagles lost by Crassus, or whether Augustus recovered all of them. Crassus had seven legions, and therefore seven eagles,[6] in his expeditionary force; beyond that fact we are left to conjecture.[7] By a policy of silence government officials may have glossed over a failure to recover all of the lost eagles, but it is difficult to explain why unofficial comment should have been likewise secretive. On

[1] The events following the attempted escape from Carrhae are somewhat obscure as regards both time and place. No comtemporary record is extant, and the three writers who give a detailed account (Plutarch, Appian, Dio Cassius) are much later in date and contradict one another in certain points.

[2] Silius Italicus, VI, 15–40.

[3] Florus, IV, 12, 38.

[4] Pliny, *N. H.*, X, 16.

[5] Mommsen, *History of Rome*, V, 162.

[6] Pauly-Wissowa, *Real-Encyclopaedie*, II, 318.

[7] Gardthausen has collected the numerous references from literature, sculptured monuments, and coins in *Augustus und seine Zeit*, I, 2, 818–829, and II, 1, 471–477.

the other hand, it is equally difficult to explain why the number originally lost should have been left unmentioned both officially and unofficially.

For hundreds of years after the battle of Carrhae this same region was the scene of many contests between the Romans and their oriental foes, whether Parthians or their successors in empire, the Persians. The height of Roman success was reached under Trajan early in the second century of the Christian era, but thereafter fortune tended increasingly to favor the East. The Rochester eagle may well have been lost or hidden in one of these numerous wars. I may mention in particular the defeat of Galerius by the Persians in 296 A.D. on, or near, the battlefield made memorable by the downfall of Crassus. In the slowly dying Empire military disasters became so common that the loss of an eagle need not have seemed worthy of special comment.

So far I have been considering merely the possibility that the Rochester specimen is a legionary eagle. The best account of Roman military standards is given by A. von Domaszewski, *Die Fahnen im Römischen Heere.*[1] The article is especially valuable for the hundred illustrations of Roman standards as represented on gravestones, on triumphal arches and columns, and on coins. Figures 3–10 illustrate the legionary eagle, standard of the legion as a whole. In each case, if we may judge by comparison with other objects on the monument, the eagle is of imposing size, probably ten or twelve inches in height. Other illustrations[2] show a much smaller eagle as one of the various symbols making up the standard[3] of a maniple, a century, or even an auxiliary force. If we may again be permitted to judge from a comparison with other objects represented on the monument, this lesser eagle is in every case of about the same size as the Rochester specimen. It is also worthy of note that if the bearer of a legionary eagle is mentioned in an accompanying inscription, he is called *aquilifer,* while the bearer of a lesser *signum,* even though his standard carries an eagle as one of its symbols, is called *signifer.*[4] Furthermore, all of the eagles shown by Domaszewski may be referred to two general types. Type I exhibits the bird with head and body thrown forward and wings lifted on high as in flight, or on the point of rising in flight. Just half of Domaszewski's legionary eagles plainly show this attitude, and literary tradition [5] seems to favor it as the customary form. Type II shows

[1] *Abhandlungen des archaeologisch-epigraphischen Seminares der Universität Wien,* 1885, 1–80.

[2] Fig. 33, 51, 52, 56, 57.

[3] It should be noted that the eagle is not a necessary part of the standard of these smaller divisions of the army.

[4] Domaszewski, Fig. 3, 4, 86.

[5] Tacitus, *Hist.,* I, 62.

the bird with erect posture, head turned to one side, usually the left, and with wings outspread and drooping. The other half of Domaszewski's legionary eagles show this attitude, though somewhat doubtfully, but all of his smaller eagles, together with the Rochester specimen, belong unmistakably to type II.[1]

If the conclusion to be reached is that the Rochester eagle once formed part of the standard of a smaller unit than the legion—and such is my own view—then the theory that it belonged originally to the army of Crassus becomes much less improbable. Crassus must have lost some scores of standards, legionary and lesser, and it is highly unlikely that an accurate count was kept, or that thirty-three years later the Parthians could have returned the exact number missing, however good their intentions may have been. Augustus, Tiberius, and their staff were doubtless satisfied with the substance of the triumph, and it is likely that no one else was in a position, or sufficiently interested, to investigate how accurately the numbers tallied. It is an attractive and somewhat plausible conjecture that one of the small bands of the Crassan army, disorganized and fleeing in terror towards safety in the west, abandoned or buried its standard near Doliche.

It is an interesting study to compare the Rochester eagle with other existing specimens; but the eagles are too widely scattered, and the published descriptions as yet too meagre, to permit us to hope for very satisfactory results from a detailed inquiry. I have found but one list of eagles, genuine or doubtful, supposed to be still existing. It is found in the article on *Signa Militaria* by A. J. Reinach.[2] The passage reads as follows: "Plusieurs aigles dont la provenance est inconnue dans Causse de la Chausse, *Romanum Museum* (Rome, 1690), pl. XV et XVII; *Rec. d'ant. rom.* V, 15, dans Graevius, t. X, p. 1528 (repr. dans Duruy,[3] *Hist. des Romains*, II, 484), et dans Caylus, Receuil, I, pl. XCIV, I; VI, pl. XCII, 1–3 . . . Aux musées du Louvre (Longpérier, *Bronzes du Louvre*, n. 938), de Saint-Germain, et de Spire sont conservés trois exemplaires douteux d'aigles aux ailes éployées; un autre semblable trouvé au Val de Ruz,

[1] It is a curious fact that the staffs of the lesser standards in Domaszewski's illustrations are regularly crowded with various symbols, conspicuous among which are flat, circular disks of uncertain material and meaning, whereas the shaft of the legionary eagle is a bare pole, quite unadorned. There is one striking exception to this rule. On the cuirass of the famous Prima Porta statue of Augustus in the Vatican the sculptor has protrayed the final scene of the Parthian humiliation in 20 B.C. A barbarian holds aloft a legionary eagle, which he is on the point of laying at the emperor's feet, and in this case the staff is decorated with three widely separated disks. Furthermore, the eagle itself, though predominantly of type II, shows certain characteristics of type I. I conjecture that the artist thus symbolizes the surrender of both forms of the Crassan standards, the lesser *signa* as well as the legionary eagles.

[2] Daremberg et Saglio, *Dictionnaire des antiquités grecques et romaines*, Vol. IV, p. 1310, n. 13.

[3] Reinach is mistaken in this reference. The illustration in Duruy is from Plate XV of de la Chausse, and only Plate XVII is reproduced by Graevius.

Antiqua, 1884, pl. XXXVII, et une aile d'aigle en bronze provenant probablement d'une enseigne trouvée a Cézéria et conservée au Musée de Louis-le-Saulnier (*Annuaire de Jura*, 1859, pl. V). Une aigle de bronze qu'une couronne surmonte portant les lettres S. P. Q. R. aurait été trouvée à Solana de los Barros (Estramadure). Cf. *Boletin de la real acad. de hist.*, 1907, p. 241.[1] . . . Peut-être faut-il voir aussi une aigle de légion dans celle qui a été trouvée au forum de Silchester, *Archaeologia*, XLVI, pl. XVII (Cf. Reinach, *Bronzes figurés*, p. 291).

Both of the eagles mentioned by la Chausse are described as belonging to private owners, the one to P. A. Roland, the other to Joseph Felix, "Prélat domestique du St. Père." The author considers both of them legionary eagles, but gives no indication of their size. The somewhat fanciful illustration of the first named (reproduced in Duruy, *loc. cit.*) plainly shows the eagle as belonging to type II, and therefore only doubtfully legionary. Whether either of these eagles is now in existence I have been unable to discover.

Of the two eagles illustrated by Caylus, the first is described as admirably preserved. In general appearance it is strikingly similar to the Rochester specimen; but the author gives its height as only "quatorze lignes" (approximately three centimeters), and the width between the tips of its wings as also "quatorze lignes." This eagle is so small that I am compelled to doubt the correctness of its ascription by Reinach to a military standard. Caylus makes no such claim for it. The second eagle, though its wings have been lost, is clearly of type II. Largely on account of its much greater size ("cinq pouces, neuf lignes," or about thirteen and six-tenths centimeters) Caylus assigns it to a legionary standard. Again the ascription is in my opinion very doubtful. Not only does the eagle belong to type II, but the size is only slightly greater than that of the Rochester specimen, and I should consequently assign it to one of the lesser standards. Unfortunately Caylus does not mention where his two eagles were preserved, and I have been unable to trace their later history.

Of the three "doubtful" specimens mentioned by Reinach as now preserved in the museums of the Louvre, of Saint Germain, and of Spire, the first named is briefly described by Longpérier.[2] It was found at Paris in the Seine, is attached to a mounting ("monture") shaped like a Y, and had apparently served as part of the decoration of a military standard. Its height is 0.14 m., and therefore but slightly larger than the Rochester specimen. Of the two preserved in the museums of Saint-Germain and of Spire I have no further information.

[1] A misprint in Daremberg et Saglio for 249.
[2] *Bronzes antiques . . . du Louvre*, 1879 (p. 204, no. 938).

The eagle described in *Antiqua*,[1] as found at Val de Ruz, later came into the collection of F. Beck in Neuchatel. It belongs to type II, though the wings are more widely extended than is usual in that type, and its size is approximately that of the Rochester specimen. It may possibly have formed a part of one of the lesser standards.

The *Annuaire de Jura*, 1859, with its reproduction and description of a bronze wing of an eagle probably belonging to a standard found at Cézéria and preserved in the museum of Louis-le-Saulnier, has proved so far inaccessible to me.

In the *Boletin de la real Academia de la Historia*,[2] the Marques de Monsalud reports the finding of a military standard of bronze at Solana de los Barros (Estramadura). Above on the standard was a small eagle with outspread wings, and below in a circle the letters S. P. Q. R. The Marques thinks the standard probably belonged to a maniple of the Legio V or Legio X quartered at Mérida, but he gives no detailed description of the eagle, nor does it appear where the standard was taken for preservation.

Last in his list comes the find at Silchester, which Reinach thinks "peut-être" a legionary eagle. J. G. Joyce, writer of the article in *Archaeologia*,[3] announcing the discovery, not only is convinced that the eagle is legionary, but considers it the most important find made in the Silchester excavations. According to the description of Joyce, the eagle measures nine inches from the curve of the upper mandible to the tip of the tail. The wings have been lost, but were originally fastened in sockets on the back and rose vertically above the head. The talons appear to have clasped a thunderbolt, but the thunderbolt was not found and the talons themselves suffered mutilation when the eagle was wrenched from the staff. Every feather is carefully worked, and a small particle of the gilding which once covered the eagle still remains. Joyce conjectures that the eagle was concealed under the roof of the *aerarium* in the Silchester forum to protect it from capture during a mutiny, and that the fall of the building caused by fire resulted in the permanent loss of the standard to its legion. After its discovery in 1880, the eagle was taken to Stratfieldsaye House for preservation. A comparison of the illustration in *Archaeologia* with Joyce's description of the position of the wings shows that the eagle belongs to type I, and I see no reason to doubt its legionary character. In fact it is quite possible that this is the only legionary eagle now in existence.

In his *Répertoire de la statuaire grecque et romaine*, 1897–1910, Salomon Reinach gives illustrations of many bronze eagles preserved in public and private collections. Unfortunately the scope of his work permits him to add but the briefest of notes, and he confines

[1] 1884, p. 168 and pl. XXXVII.
[2] L (1907), p. 249.
[3] XLVI (1881), pp. 363–4.

himself to mentioning where the eagles were found or are preserved, with only occasional references to published descriptions. In no case does he indicate the size of the eagle, and consequently, when other sources of information are lacking, judgment as to the military character of any specimen can hardly be more than a guess. The *Répertoire* shows four of the eagles included in the list of A. I. Reinach.[1] Three others, all of type II,[2] may possibly be additional specimens from lesser standards.[3]

In Republican times the legionary eagle was regularly of silver,[4] under the Empire often of gold,[5] and in its talons it generally held a golden thunderbolt.[6] It seems probable that the same rules applied to the eagles of the lesser standards. That the silver or gold was spread over a base of bronze is proved by the fact that all existing specimens are of bronze and that the Silchester eagle still retains a small speck of its original gilding.

The Rochester eagle is approximately ten and nine-tenths centimeters in height and ten and six-tenths centimeters wide from wing to wing. Its weight is ten ounces. The tip of the right wing has been broken off and lost, but otherwise the eagle is in a fair state of preservation. On top of each of the three outer talons on either foot is a shallow groove, suggesting the possibility that the bird was wired to a separately molded thunderbolt. The relic was unfortunately cleansed with excessive zeal before it came to America. If we may judge from certain marks on its back, the patina was removed with a file, and with the patina disappeared whatever may have survived of gold or silver. An interesting feature of our eagle is that the feathers are very carefully traced on all of the parts in front and around the neck, but with less realism on the rear of the neck, whereas the back of the body and of the wings shows a perfectly smooth surface. Caylus (*loc. cit.*) reports the same facts about the larger of his eagles and suggests that the back of the bird was not visible. Sculptured representations of the lesser standards often show the eagle crowded in between other symbols above and below, and with its back at least partially concealed by the staff behind; but the legionary eagle always rises free from the summit of the staff, additional evidence, if it be needed, that neither the Caylus nor the Rochester eagle belongs to the legionary type.

Charles Hoeing

The University of Rochester

[1] II, 769, 1 (Val de Ruz), 769, 5 (Silchester), 771, 2 and 6 (Caylus, I, 94, 1, and VI, 91, 1).

[2] II, 771, 1 and 3 (Caylus, IV, 85, 3, and III, 65, 3), and IV, 533, 3 (Avignon).

[3] To determine with any degree of accuracy the number of existing eagles, and their legionary or lesser character, will require the coöperation of directors and owners of collections all over the world. The writer of this article will gratefully appreciate further information from any source.

[4] Cicero, *Cat.*, I, 9, 24; Pliny, *N.H.*, X, 16.

[5] Dio Cassius, XI, 18.

[6] Dio Cassius, XLIII, 35.

Archaeological
Institute
of America

THE PLACE OF *I.G.* I, 256 IN THE *LAPIS SECUNDUS*

In attempting to list the names of all cities tributary to Athens in the quadrennium before the outbreak of the Peloponnesian War, I discovered that Fimmen's reconstruction of the second stele,[1] in so far as it concerns the position of *I.G.* I, 256, could not be made to fit the conclusions I had reached. Consequently, I found it necessary to examine carefully the validity of his work, with the result that I concluded Fimmen's error was due to failure to apply a simple test to his quite unnecessary assumption that *I.G.* I, 256, a part of the quota list of 432–1, came from the bottom of a lateral face of the stele. It is actually about equidistant from both top and bottom.[2]

Let us assume for the purpose of argument that Fimmen was right in placing *I.G.* I, 256 at the very bottom of the stone, separated from *I.G.* I, 247 at the top by a gap the width of which Fimmen unfortunately for his assumption did not attempt to gauge. We shall now have a quota list 0.32 m. longer than that of the previous year, 433–2.[3] Since six names in our inscription occupy the space of 0.10 m., and since there are two columns, it is easy to see that the list of 432–1 was thirty-six names longer than its predecessor. In other words, the increase in names is 20 per cent.

But it should be noted that the year 432–1, from which *I.G.* I, 256 comes, saw the failure of Athens to reëstablish her authority over the rebels of the Chalcidian peninsula. This failure is reflected in our list by the absence of at least sixteen Thracian names from the appendices and the body of the list, names found in the quota list of

[1] *Ath. Mitt.*, 1913, pp. 231–238. He has shown correctly that *I.G.* I, 256 and 255 (*I.G.* I², 208) are a part of the *lapis secundus* and that *I.G.* I, 247 and 256 are from the same year, 432–1. At the top of *I.G.* I, 256 belongs another fragment published by Mr. Tod, *B.S.A.*, X (1904), pp. 78 ff. Although *I.G.* I, 247, 256 and the *B.S.A.* fragment should now be cited as *I.G.* I², 213, it will be more convenient to refer to them by their old numbers. The other quota lists I shall cite by the numbers given them in the second edition of the *Corpus*, as follows:

I.G. I,	242:	*I.G.* I²,	210
"	243:	"	211
"	244:	"	212
"	245:	"	206
"	246:	"	207
"	255:	"	208
"	259:	"	218

[2] For the far-reaching consequences of this reconstruction, see Meritt's article, The Assessment of 438–7, which will appear in this Journal in the near future.

[3] *I.G.* I², 212. Since it occupies a position corresponding to that of *I.G.* I, 247–256 (*I.G.* I², 213) on the other lateral face of the stele, the two inscriptions would be of equal length, except that at the bottom of *I.G.* I², 212 is an uninscribed portion 0.32 m. long.

433–2.[1] Thus the difference in the lists is actually fifty places, about 25 per cent of the list of 433–2.

But since Fimmen gives us the height of the stone as 2.22 m., it is not difficult to estimate the number of lines it would have contained had it been inscribed as he thought. Subtracting the seven lines of heading in *I.G.* I, 247, each occupying about .025 m. we have for the body of the inscription about 2.00 m., enough for 240 names. From this number we should subtract possibly thirty or forty names so as to provide room for headings, for cities paying epiphora, and for others whose names occupied more than one line. Even after making this deduction we have a list that contains about thirty more names than are found tributary during this period and about forty more than are found in the fairly complete list of 433–2.[2] In fact it contains more names than are found in the lists of any one assessment period.

If this were true, one would expect to find our quota list resembling the assessment list of 425–4[3] in having new names in addition to those that had disappeared from the lists both before and after the Samian revolt. But strangely enough, so far as comparison is possible, the list is in no way different from its immediate predecessors except for the losses caused by the revolt of 432.

Nevertheless, if Fimmen should be right, the stone would indicate that Athens was trying to make up for losses of tribute in Thrace by tightening the bonds of empire and by bringing back into the fold earlier delinquents. Since this would be most important historically, if true, we must make a further analysis of the consequences of Fimmen's theory in an attempt to discover the districts in which this policy may have been followed.

The stone as reconstructed by Fimmen's plan has a complete Thracian list, practically complete appendices,[4] and although few island names are extant, we know that the island list ended at the bottom of the first column, for at the top of the second column, *I.G.* I, 247, we find the Hellespontine heading preserved. Thus assuming with Fimmen that two lines at most are gone from the bottom of the stone, we find that the number of island tributaries has not increased proportionately to the rest of the list. Instead, the islands

[1] From the Thracian list we miss Assera, Mecyberna, Olynthos, Potidaea, Singos, Skabla, Skapsa, Strepsa, Spartolos, and Phegetos. To these names we might add Sermylia and Stolos, not found in *I.G.* I [2], 212. From the appendices are lacking probably Aioleion, Gale, Milkoros, Pharbelos, Chedrolos, and Pleume.

[2] In *I.G.* I [2], 212 thirty-one lines must be subtracted to ascertain the actual number of cities listed. There are two columns of 94 lines each. Thus it contains a maximum of 157 names. In this computation I have assumed that the two columns were equal in length, thus adding six names.

[3] *I.G.* I, 37 (*I.G.* I [2], 63).

[4] Fimmen thinks that only about two lines have been lost from the bottom. Thus the second appendix of *I.G.* I, 256 would be almost identical with the second appendix of *I.G.* I [2], 212 as it is found today. In this respect Fimmen agrees with the Corpus: *desunt versus haud ita multi.*

now number thirteen or less, whereas there were probably twenty-three paying tribute at this time. In other words, we have a loss instead of the gain we have been led to expect.

The gain is therefore entirely in the Hellespontine and Ionic districts. As the Ionic list occupies all but the last thirteen lines of the first column, at least 107 lines, not counting the Ionic prescript, must be assigned to it according to Fimmen's reconstruction of the stone, enough for the combined Ionic and Caric lists at the height of Athenian power. In fact, the Corpus index, *editio prima*, lists only 104 names, of which, four are found only in the appendices during this period; at least eight, the five Erythraean dependencies and Leros, Teichioussa, and Priene, now dependent upon Miletus, are no longer listed separately, and about ten are found only in one or two of the earlier lists. Thus after listing every name, including the occasional contributors, we would still have room enough for more than the usual number of cities paying epiphora.

As the Hellespontine list is 35 lines shorter than the Ionic, it would contain seventy-two lines, twenty-eight more than are necessary to list every Hellespontine name in the quota lists before 425.

For the assessment period beginning in 434–3 I have made a list of tributaries which will illustrate the impossible situation created by Fimmen's reconstruction of the stone.[1] My list contains fifty-one Ionic-Caric names, instead of one hundred seven, thirty-two Hellespontine names to go into seventy-two lines, twenty-three island names instead of fifteen, and forty-one Thracian in place of twenty-seven.

To make the discrepancy more noticeable, it is necessary only to try to complete the Hellespontine list with its extant seventeen names occupying exactly seventeen lines. It should be noted that none of these cities is listed a second time as paying epiphora. If we insert the fifteen absentees, taken from my typical list, we still have forty places to fill, a physical impossiblity, unless we assume that each of the fifteen names occupied either two or three lines each.[2]

[1] While I was checking this list, made for another purpose, I discovered that if I put into the gap between *I.G.* I, 247 and 256 the name of every Hellespontine city paying tribute in this period, *i.e.*, between 440 and 430, not found in our inscription, the letters which Fimmen saw on the upper corner of the broad face of frg. 1 of *I.G.* I, 256, his *Abbildung I*, letters which he said were a part of the prescript of *I.G.* 1², 211 would not be on the stone at all. Similarly, *I.G.* I², 208, which Fimmen thought was a part of the third list on the other broad face of the stone, would be off the stone. Either the gap was larger than I had any reason to expect, or *Abbildung I* must be given to *I.G.* I², 210, and *I.G.* I², 208 to *I.G.* I², 207.

[2] The missing Hellespontine names are as follows: Azeia, Byzantion, Elaious, Lamponeia, Lampsakos, Parion, Cherronesians from Agora (all found in *I.G.* I², 212), Daskyleion (*I.G.* I², 211), Alopekonnesos, Madytos, Paisos, Priapos, Sestos (found in *I.G.* I², 210), and Perkote and Palaiperkote (*I.G.* I², 218). Possibly the two Perkotes should be omitted, for they are found in no list between 440 and *I.G.* I², 218, the date of which, since Fimmen's work, is no longer certain. It may go almost anywhere in the first years of the war.

Turning now to the Ionic list, we find that my complete typical list requires about seven places more than are found on the three fragments which make up our list.[1] This means a gap of ten lines in the second column, for the extant portion of the first column in *I.G.* I, 256+*B.S.A.*, 1904 (X), pp. 78 ff. extends three lines above the second column of *I.G.* I, 256. Consequently the gap between the two parts of the stone is probably between ten and fifteen lines. While the gap of about fifteen lines required by a complete Hellespontine list is longer than the gap of ten lines required by a complete Ionic list, the general agreement is evident. It is sufficient to establish the approximate accuracy of my typical lists and the approximate length of the gap.

Let us now assume that in the second column the gap between the last line of *I.G.* I, 247 and the first line of *I.G.* I, 256 is ten lines. Then the stone measures about 1.45 m. to the bottom of the part preserved.[2] Since the *lapis secundus*, according to Fimmen whose figures I shall use, measured 2.22 m., we have lost about 0.77 m. at the bottom, and there is plenty of room for the missing Island names that have caused us so much difficulty by their absence.[3]

We are now in a position to use *I.G.* I², 212, the quota list of the preceding year inscribed on the corresponding face of the second stele, as a standard by which to test the general accuracy of our conclusions. Except for the changes caused by the revolt in the Thracian district and for minor divergencies, the two quota lists ought to resemble one another very closely.

In *I.G.* I², 212, the Ionic district occupied the first fifty-eight lines, possibly from two to five more, of the first column. Our reconstruction of *I.G.* I, 247–256 (*I.G.* I², 213) gives the first sixty-three lines to Ionic-Caric names. The Island list follows in both inscriptions, with about twenty-three lines for it in the earlier, and room for the same number in our list at the bottom of the first column in the part now lost.

The second column of *I.G.* I², 212 continues the Hellespontine list, begun at the bottom of column I. It occupies about thirty-three lines. Our plan gives the first twenty-nine lines of the second

[1] The missing Ionic names are as follows: Pyrnos, Pitane, Karbasyande, Termera, Teos, Phaselis, the Ikarian Oinoe, Aulia, Pasande, Telandros, Kaunos, the Ikarian Thermai, Nisyros, Klazomene. Except for Klazomene, which is found in *I.G.* I², 206, these cities are listed in *I.G.* I², 212, the quota list of the preceding year. If not actually found, the names have been correctly restored there, *e.g.*, Termera, in line 58, Loeschke, *De tit. aliq. Atticis*, p. 13, Possibly a few other names should have been added to my list, as Assos, Lebedos, and Diosiron, but it is impossible to add many.

Since some of these names may have paid epiphora and others probably occupied two lines, we can determine the length of the gap only approximately.

[2] Seven lines of heading take about 0.20 m. For 75 lines of text we need 1.25 m., since six lines take 0.10 m.

[3] There is nothing improbable in our assumption that the bottom of the stone was uninscribed. The uninscribed portion was altogether too short for a complete quota list, just as in 433–2, and consequently it was not used.

column to the Hellespontine district. The Thracian lists and the appendices that follow are of course much shorter in 432–1. The difference between the two lists is therefore slight except where differences are expected.

Another comparison is possible. At what point in *I.G.* I², 212 would the line of the top of *I.G.* I², 211, or *I.G.* I², 210, come if it were extended around the corner? As the Corpus shows, *I.G.* I², 210 occupies on the broad face of the stone a position corresponding very closely to that of the Thracian list in *I.G.* I², 212. But according to Fimmen, the lower lines of the Hellespontine list, all of the Thracian list, and the two appendices of our list correspond in position not with *I.G.* I², 210, but with *I.G.* I², 211, the list that follows *I.G.* I², 210 on the broad face. Thus the correspondence between the two quota lists disappears. But our reconstruction brings the top of *I.G.* I², 210 about three lines above the place where we found it in the list of the previous year.

Probably no one would now question our conclusions as to the length of the gap and the place of *I.G.* I, 256 in the stele, except that Fimmen has recognized on the broad face to the right of fragment 1 of *I.G.* I, 256 letters that must have come from a prescript belonging to one of the quota lists of that face. This he says belongs to *I.G.* I², 211. It is the proper distance from what he considered the bottom of the stone, *viz.*, 0.85 m. But if we assume that the bottom of the stone was uninscribed, we must shift our fragment 0.74 m. toward the top.[1] Then the prescript, *Abbildung I* of Fimmen's article, is 1.59 m. from the bottom of the stone or 0.63 m. from the top.

Here is the test for our hypothesis and the assumptions on which it was based. The heading of *I.G.* I², 211 is about 0.63 m. from the top of the stone.[2] The *Abbildung* belongs therefore to *I.G.* I², 210, not to *I.G.* I², 211, to the twentieth, not to the twenty-first year. It should read: Ἐπὶ [τε̑ς ε]ἰ[κοστε̑ς ἀρχε̑ς, ℎε̑ι Θοίνιλος[3] – – –] Ἀχαρ[νε]ὺς ἐγραμμάτευε. | [Ηελλενο]τ[αμίας ε̑̓ν – – – ἐκ Κεραμ]έον.

This reading obviates a difficulty created by Fimmen's theory of reconstruction. He saw clearly an *iota* where it could not be if the ordinary formula, ἐπὶ τε̑ς πρότες καὶ εἰκοστε̑ς ἀρχε̑ς, was used.[4]

[1] Since Fimmen assumed a loss of two lines at the bottom, we have not shifted the stone the full 0.77 m. upward, but 0.77 m. minus the space of two lines, or 0.74 m.

[2] Until *I.G.* I², 212 is properly reconstructed, it is impossible to give the exact height of the stone above the prescript of *I.G.* I², 210.

[3] For the name of the secretary, see Dinsmoor, *A.J.A.*, 1921, p. 244.

[4] In the following copy of the *Abbildung*, I have placed within brackets those letters which Fimmen drew with dotted lines to show that they are more or less indistinct. The others cannot be any too clear:

ΕΠΙ [ΤΕΣ Μ]Ι
ΕΛ[ΡΑΜΜΑ]Τ
[ΙΟΝΙΚΟΣΦΟΡ]ΟΣ

Of the first *epsilon* in the second line he marks as comparatively legible the two upper cross bars. Of the *gamma* he gives a part of the left hand downward stroke.

Thus he was forced by the *iota* to adopt the unusual, if not anomalous, form ἐπί τε̂ς μιᾶς καὶ εἰκοστε̂ς ἀρχε̂ς. Our reading, however, has the *iota* in the proper place. Fimmen justifies his reading with the statement that the breadth of the stone requires fifty-seven letters as they are spaced in the extant part of *I.G.* I^2, 211. Consequently there would be no room for the two extra letters demanded by the use of πρότες. Nevertheless, as can be readily seen, the spacing shows considerable irregularities, enough to make it unsafe to figure too closely. Moreover, since the columns vary in width, it is impossible to argue from the number of letters over the last two columns as to the number of letters over the first three which have not been preserved. Nor are these headings strictly στοιχηδόν. Thus until there is proof to the contrary, we should restore the heading of *I.G.* I^2, 211 to read, [ἐπὶ τε̂ς πρότες καὶ εἰκοστε̂ς ἀρχε̂ς, *h*ε̂ι Προτόνι]κος ἐκ Κεραμέον 'Επιχάρος| [ἐγραμμάτευε, if necessary omitting the *h* of *h*ε̂ι.[1]

Another letter which Fimmen marks as clearly distinguishable is the *tau* of ἐγραμμάτευε. Since it is found where the *tau* of Hελλενοταμίας should be, we may regard our reading as established by Fimmen's *Abbildung*, despite the fact that he seems to have convinced himself that the bare traces of other letters, none of which he marks as distinctly legible, were as he gives them and not as we have assumed. Nevertheless, he is very careful to state that the stone is very much weathered and marked by water. Thus it was difficult for him to read the letters he transcribes, and no one before him had even seen them. So rough is the surface that the Corpus says of it, *non solum non scriptus, sed ne laevigatus quidem.* Because of this difficulty I feel no hesitancy about proposing another reading, especially as it agrees with his in every letter for which he claims complete legibility and gives us faultless Greek.

To continue, on the broad face of the stone opposite to Fimmen's *Abbildung* is found *I.G.* I^2, 208. Since the heading which Fimmen discovered is now known to belong to the second of the three inscriptions on one face, having been elevated 0.74 m., *I.G.* I^2, 208 can no longer be assigned to the third year of the corresponding face. It too has been elevated 0.74 m., and there is now more than room enough for a complete list below it. Therefore it belongs to the second of the three lists inscribed on that face of the stone and with *I.G.* I^2, 207 dates from 438–7.[2] We now have a large part of the

[1] For an analogous difficulty, see the heading of *I.G.*I.², 212. Fimmen's date for this is the twenty-second year. Since lines 2 and 5 seem to require 14 letters, we cannot read ἐπ[ὶ τε̂ς δευτέρας καὶ εἰ]|κοσ[τε̂ς ἀρχε̂ς. The alternative, ἐπὶ [τε̂ς δυοκαιει]κοσ[τε̂ς ἀρχε̂ς though not satisfactory, having 14 letters in the first line, would seem to be correct, as Fimmen points out.

[2] The heading should be restored: [ἐπ]ὶ τε̂ς [*h*εβδόμες καὶ δεκάτες ἀρχε̂ς, *h*ε̂ι – – – νόσιος] | [ἐγρα]μμ[άτευε. Dinsmoor, *A.J.A.*, 1921, p. 243, gives the demotic of the secretarv as 'Αγνούσιος or 'Ραμνούσιος.

stone on which this list was inscribed, although most of the letters are no longer legible. Negatively, however, this may be important for it may serve as a means of proving that certain fragments do not belong here. Moreover, it leaves one year, 437–6, without any names extant.

In conclusion, Fimmen's assumption that *I.G.* I, 256 came from the bottom of the stele leaves us with impossibly long Ionic and Hellespontine lists and an Island list as short as the others are long. Furthermore, the assumption is unnecessary, for by raising the inscription to the point where our Ionic and Hellespontine lists are of the proper length, we find that Fimmen's *Abbildung*, now in line with the prescript of *I.G.* I², 210, has clearly preserved in the proper places letters which almost require that we assign it to the twentieth year, *i.e.*, to *I.G.* I², 210, not to *I.G.* I², 211. Finally, when reconstructed as we have suggested, *I.G.* I, 247–256 (*I.G.* I², 213) parallels very closely its counterpart, *I.G.* I², 212, the quota list of the preceding year.

The following table shows the obvious changes required by our reconstruction of the *lapis secundus:*

438–7 B.C.	*I.G.* I², 207, 208.
437–6 B.C.	Frg. 11 of *lapis secundus, nunc muro inmissa.*
435–4 B.C.	*I.G.* I², 210 and Fimmen's *Abbildung 1.*

Allen B. West

Wheaton College
Norton, Mass.

Addendum

In confirmation of the conclusions stated in the foregoing paper, I quote verbatim from a letter written by Professor Sidney Deane to Professor B. D. Meritt, with whom I had discussed the various problems of this paper and from whom I have received many helpful suggestions. The letter was received too late to be incorporated in the paper.

Professor Deane writes: "In the first line the only letters really distinguishable are

"In the second I read

"I am quite sure of the H, which confirms your reading. Between

the E and Ͱ is a troublesome X, a part of which I think Fimmen may have taken for part of a letter. I presume it is a meaningless mark.

"Around the corner (a little above) is

HHH ΠΡΟΚΟΝΝΕΣΙΟΙ,

while the next line is a little below the first line of the broad side."

Only one change in my calculations is necessary. I had assumed that the *Abbildung* was located two lines higher on the stone than it really is. This error was due to my equating Fimmen's 0.85 m. with 51 lines. It apparently equals 49 lines. Correction of this error requires us to assume a lacuna of about eight lines, not ten, between *I.G.* I, 247 and 256.

But I must warn the reader that the figures given in the paper, especially those relating to the lacuna, are only approximate, since many of them are based directly or indirectly upon Fimmen's calculations as to the height of the stone. If the upper portion of *I.G.* I^2, 212 is incorrectly reconstructed, as I think it is, exact figures are now impossible.

Allen B. West

Archaeological
Institute
of America

NOTES ON "LOST" VASES: III[1]

The new edition of Salomon Reinach's *Répertoire des Vases Peints*, which has just appeared, is most welcome, and fills a long-felt need. This amazingly versatile scholar has brought the book up to date in many respects, and has located many of the vases which were "lost" at the time that the first edition appeared. On glancing through the two volumes, however, the reader will find that there are still a tantalizingly large number of vases left, to the present location of which there is no clue. Let us hope that a sufficient number of these will be found within the next twenty years to make a third edition imperative.

But in this new printing there are a surprisingly large number of errors and omissions. It is to say the least regrettable that for most of the vases in Athens M. Reinach is still content to refer to the obsolete catalogue of Collignon, which was replaced by that of Collignon and Couve in 1902, and which in its turn was supplemented by the catalogue of Nicole in 1912. These two catalogues are practically ignored by M. Reinach, who is also apparently ignorant of the second Bologna catalogue (*delle Necropoli Felsinee*, commonly referred to as *Necr. Fels.*) which dates back to 1912; for never once does he refer to this catalogue in his text, although a large number of the *Necr. Fels.* vases are of necessity included in the book. Another tantalizing feature is that the numbers of vases in the Louvre are never given,—it is hard to understand the reason for this omission. It is also a great disappointment to see the same old typographical errors and errors of description that marred the first edition, reappearing in the second.

But this is not a book review—it merely purports to be a list of vases found, which in this new edition are still described as lost, or to give more accurate information regarding certain vases, the location of which is indicated. For this reason I shall give the Collignon-Couve, and *Necr. Fels.* references, in every case.[2]

Mon. Dell' Inst.

VIII, pl. 4.	Athens,	Collignon-Couve	688.
VIII, pl. 5.	"	"	1167.
IX, pl. 39.	"	"	214.
IX, pl. 40, 2.	"	"	275.[3]
X, pl. 34, 1.	"	"	1225.

[1] See *A.J.A.*, XXI, 1917, pp. 409–416; XXIV, 1920, pp. 271–272; XXVII, 1923, pp. 184–187.
[2] For abbreviations used, see *A.J.A.*, XXI, 1917, p. 409.
[3] Reinach incorrectly gives this number for the vase on pp. 189–90, no. 2, in Vol. I: the correct number in Collignon-Couve for that vase is 350.

X, pl. 34, 2. Athens, Collignon-Couve 1228.
X, pls. 54, 55. Bologna, *Necr. Fels.* 269.
XI, pls. 4, 5. The Faina Collection is at Orvieto, not Rome.
XI, pls. 14, 15. Bologna, *Necr. Fels.* 268.
XI, pl. 19. Bologna, *Necr. Fels.* 228.
XI, pl. 42, 2. Acquired in 1925 by the Metropolitan Museum, New York, N. Y.

Mon. Dell' Inst. Suppl.

pl. XXI. Bologna, *Necr. Fels.* 303.

Ann. Dell' Inst.

1846, pl. M. National Museum, Copenhagen, 126.
1868, pl. E. Caputi collection, Ruvo, not Jatta.
1868, pls. H, I. The description of side B of pl. I belongs to pl. H. As pl. I is an oenochoe, it cannot have a side B.
1877, pls. C, D. All these vases are in the Museum of Syracuse.
1879, pl. N. Athens, Collignon-Couve 1287.
1880, pl. N. Bologna, *Necr. Fels.* 318.
1881, pls. F, G. Bologna, *Necr. Fels.* 325.
1882, pl. O. Louvre G364.

A. Z.

1850, pl. 16. Bologna, *Pal. Univ.*, 434.
1863, pl. 174. The number in the Bibliothèque Nationale is 874.
1863, pl. 175. Athens, Collignon-Couve 620.
1865, pl. 199. Athens, Collignon-Couve 1858.
1876, pl. 17. The vase is an amphora, not a cup.

Bull. Nap.

III, pl. I, 1, 2. At Harrow School; See Beazley, *V.A.*, p. 132.
n. s. V, pl. X, 17. Lebes, not stamnus.

'Εφ. 'Αρχ.

1883, pl. 2. Athens, Collignon-Couve 1270.
1883, pl. 7. " " 1259.
1883, pl. 7a. " " 1894.
1885, pl. 3, 3. " " 1160.
1885, pl. 5, 1. " " 853.
1885, pl. 7, 1, 2. " " 621.
1885, pl. 7, 3. " " 624.
1886, pl. 1. " " 1921.
1886, pl. 4. " " 1188.
1886, pl. 4 *bis*. " " 1689.
1886, pl. 7, 1. " Graef, *Akropolis-Vasen*, III, 1632.
1888, pl. 11. " Collignon-Couve 845.
1890, pl. 2, 1. " " 1156.
1890, p. 11. Acquired in 1925 by the Museum of Fine Arts, Boston, Mass.
1891, pl. 3. Athens, Nicole 274 and 333.
1892, pl. 4. " Collignon-Couve 396*bis* and 396*ter*.
1892, pl. 8. " " 466.
1892, pl. 10. " " 462.
1892, pl. 13. " " 1589.
1893, pl. 2. " " 1477.

1893, pl. 3. Athens, Collignon-Couve 1396.
1894, pl. 2. " " 1679.
1894, pl. 6. Insert "Nicole" before the number 1227.
1894, pls. 12, 13. Insert "Collignon-Couve" before the number 477.

Museo Italiano.

II, pl. I, 1. Bologna, *Necr. Fels.*, 236.
II, p. I, 2. " " " 206.
II, pl. I, 3. " " " 241.
II, pl. I, 4. " " " 130.
II, pl. II, a. " " " 300.
II, pl. VI, a. Athens, Collignon-Couve 1241.
III, pp. 260–262. Add, "*Cat. Pal. Univ.*, 270."

Coghill.

11. Acquired by the British Museum in 1924.
35, 2. *Hope Sale Cat.*, 32, 2.
41. *Hope Sale Cat.*, 62.

A. V.

84, 85. British Museum E8; see Beazley, *V. A.*, Appendix, Addenda, p. 193.
98, 1, 2. British Museum B474, *not* New York.
98, 5, 6. New York GR555.
117–118. The vase 1, 2 was the one in Boulogne, not 3, 4, which is still lost.
139. British Museum B318.
144. For "Abbey" read "Ashby."
146–7. Red-figured, not black-figured.
148. Red-figured, not black-figured.
192. Musée-Pincé, Angers.
326. The number in Berlin is 1998, not 1898.

Tischbein.

I, 36. In Fitzwilliam Museum, Cambridge.
I, 39. The number in the *Hope Sale Cat.*, should be 66.
I, 43. *Hope Sale Cat.*, 133, 1.
II, 8. The number in the *Hope Sale Cat.*, should be 143, 1.
II, 24. By a typographical error, the description for 1, 43 is inserted here. The subject of II, 24 is Oedipus and the Sphinx, and the vase is still lost.
II, 49. *Hope Sale Cat.*, 90, 1.
II, 55. *Hope Sale Cat.*, 78.
III, 12. The number in the *Hope Sale Cat.* should be 97, 2.
III, 57. *Hope Sale Cat.*, 95, 3.
IV, 36. The number in the *Hope Sale Cat.* should be 138, 1. The number given applies to the next Tischbein plate.
IV, 56. *Hope Sale Cat.*, 87, 2.

Stephen Bleecker Luce

Brown University
Providence, R. I.

BOOK REVIEWS

Coins of the Roman Empire in the British Museum, Volume I, Augustus to Vitellius, with an Introduction and 64 plates, by *Harold Mattingly*, pp. CCXXXI 464. London, 1923. £ 3–3–0.

This is the latest volume of the British Museum "Catalogues of Coins and Medals." It is therefore almost unnecessary to say that the bookmaking leaves little to be desired, or that the plates are clean and clear. On the 64 plates the general rule obtains of printing 15 sestertii and 40 aurei or denarii to the plate.

Count de Salis arranged, in the British Museum Cabinets, the coins shown in this volume, but as Director A. F. Hill says, he "left no written exposition of his views beyond a general statement of principles of classification." Later work on the Roman coins, however, has resulted in showing that the provincial mints, especially the one at Lugdunum, were more important than had been suspected.

Mr. Harold Mattingly, who has done the work on this volume, is assistant in the Department of Coins and Medals. He writes first a brief introduction on the original development of Roman imperial coinage, followed by 14 pages of countermarks. Then he gives a clear exposition of denominations, weights, and metals, and it must be added that the sizes of the coins are given both in inches and tenths, and the weights both in grains troy and in grammes.

A valuable resumé of "Finds of Coins" is given on pages LXXV–LXXVIII, and eleven pages are devoted to a fairly adequate bibliography. The remaining 134 pages of the Introduction are given over to a numismatic history of the reigns of the emperors from Augustus through Vitellius. The special introduction to each reign is preceded by a chronological table of imperatorial titles as guaranteed by the inscriptions on the coins. Between Nero and Galba are three pages on L. Clodius Macer, and thirteen pages on the coinage of the Civil Wars.

Pages 1–400 contain the descriptions of the coins portrayed in the plates which are all together at the back of the volume. The descriptions have the regular simple arrangement in five columns: number, weight, metal—size—position of die, obverse, and reverse. Each coin described has a note of its own giving its provenience, for "in order to make the volume as complete a work of reference as possible, descriptions of many important coins not represented in the Museum collection have been inserted in the appropriate places."

The mint issues are described chronologically. It may therefore be something of a surprise to find Lugdunum preceding Rome in the cases of Tiberius and Caligula.

Between the text and the plates are seven valuable indices which fill 61 pages. They are: I, Emperors and their relatives; II, Mints; III, Moneyers; IV, Types; V, Attributes and Adjuncts; VI, Legends (including countermarks); VII, General Index (covering the rest, but with some cross-references).

Without numismatics the classicist is badly crippled, without numismatics the classical historian dare hardly walk at all. Coins have their crudities and their difficulties, but they have become more than tolerably faithful guides, because they furnish their own illumination. We count 23 B.C. as one of the possible dates at which the Roman Empire begins. It gains definiteness when we see that on the mintage of gold and silver for the Roman world Augustus decided to rest his *imperium* abroad, and on that of bronze for Rome and Italy, in coöperation with the Senate, his *tribunicia potestas* as representative of the Roman people. His gradual absorption of power can be seen nowhere more clearly than in the way he closed the other provincial mints and enlarged that at Lugdunum, and the way he let the senatorial mint in Rome sink into obscurity by developing his own provincial coinage.

The most interesting monetary act of Tiberius was his suppression of the "altar" coinage of the "Council of the Gauls" at Lugdunum. It was undoubtedly due to the nationalist movement of which the revolt in 21 A.D. of Sacrovir was the culmination. The two so-called "periods" of Nero's reign are more clearly defined by his coinage. On the imperial gold and silver, during the first years of his reign the constitutional coöperation of the Senate is recognized by the almost invariable EX S. C.

Quite apart from the knowledge of the metals (orichalcum and copper came in during the late Republic, and were much used in the early Empire), and their weights, there are a multitude of things which repay study. The Victory coinages, the epigraphical differences in various mints, the portraiture on the coins, the hundreds of types and legends, the changing use of the word "imperator," all these demand careful study, and not a detail lacks importance.

There is in the comment of Mr. Mattingly a refreshing element. He admits being unsure about a good many things. There is the less uncertainty about the coins themselves, to be sure, because the best and most clearly marked ones have been chosen for illustration and comment. But those, and not the unclear and illegible ones, are the proper ones to describe in such a volume as the one before us.

Thanks are due the British Museum for this additional volume to their fine series on coins in the museum.

R. V. D. MAGOFFIN

New York University

IUVENTUS, by *Matteo della Corte*, pp. 97, ARPINO, 1924. 25 lire.

Dr. Della Corte has made a significant addition to his important series of studies on Pompeii which have been appearing for the past fifteen years. His monograph *Iuventus* reveals the existence at Pompeii of an organized life of exercises and sport, games and processions among the younger members of the free born citizens of Pompeii—a life which prepared the younger generation for citizenship and for the defence of the state perhaps in much the same way that will be attempted by the premilitary training of the Italian youth, recently entrusted to Mussolini's national militia. The *lusus Troiae*, equestrian exercises in which the sons of senators took part at Rome, was an old Italic institution, supposed, as the Aeneid shows, to have derived its origin from Troy. The *lusus iuvenalis*, similar games which are attested for many municipalities, goes back, as the researches of Rostovtzeff and Rosenberg have shown, to early Italic models. Evidence for these games, which in the second century of the empire led to the formation of numerous *collegia iuvenum*, has so far, except for the scant information given us by one Oscan inscription, been strangely lacking at Pompeii.

After a general discussion of the iuvenes in the Roman world, Della Corte proceeds to consider in detail the evidence from Pompeii of which he finds a surprising amount. The term *iuvenis* in the frequent election posters which recommended a candidate as *iuvenem optimum, integrum* Dr. Della Corte takes as a technical term, a reference to a member of the organized *iuvenes*. If there might be some doubt on that point there can be none about a series of inscriptions referring to games and processions in which free born men (and therefore not professional athletes) take part. One of them celebrates the performance of the *lusus serpentis* by a certain Septimius iuvenis. Another mentions a *centuria* and a *turma*, both terms familiar from the *lusus Troiae*, and both undoubtedly referring to a similar celebration at Pompeii. Still others give the names of free men who fought as gladiators, men whom Dr. Della Corte regards as members of the organized *iuvenes*. In the famous combat between the people of Nuceria and of Pompeii which led the Roman senate in 59 A. D. to close the amphitheatre

of Pompeii for ten years, Dr. Della Corte sees a contest that was caused by the *collegium iuvenum* which was, he thinks, one of the *collegia* that was dissolved as a result of the senate's action in the case.

There follows an interesting discussion of the buildings of Pompeii which can be associated with the *iuvenes*. The Forum Triangulare was, he thinks, the chief centre of their activities in earlier times, and the so-called Porticus of Vinicius, which the Oscan inscription states was constructed by decree of the municipal senate with money left to the *vereiiai pumpaiiani* (*i.e. iuventus Pompeiana*), was the property of the *iuvenes*. The Caserma of the Gladiators near by had once been a Gymnasium devoted to their use.

In later times, Dr. Della Corte thinks, the Forum Triangulare continued to be used by the *iuventus*, but other buildings were also given over to them. Most important is the building known as the armory at the end of the Via dell'Abondanza in the new excavations. This structure, with the splendid trophies painted on the door posts and the huge cases for arms and equipment, he calls a *schola iuventutis*. Finally a building near the amphitheatre, incompletely excavated in the eighteenth century and now covered over again, is, Dr. Della Corte believes, the *Balneum Nongentum et Venerium* mentioned in a poster which gives a list of buildings rented. The *Nongenti*, familiar from Pliny as a designation for jurors, are evidently men of some position. The *Venerii* are, Dr. Della Corte thinks, the *iuvenes* of Pompeii who here as in many other towns were associated with the chief local cult. On one election poster found near by the *Venerii* make a nomination. In the building, which is known from eighteenth century plans, Dr. Della Corte finds baths, a shrine, a place for games, and a spacious gymnasium to take the place of the Hellenistic gymnasium which was no longer in use. Finally Dr. Della Corte discusses an interesting painting which depicts the marriage of Hercules and Hebe before the temple of Venus Pompeiana. He interprets it as the representation of a sacred mime by the *iuvenes*.

It is impossible to give here the evidence by which Dr. Della Corte has identified these various buildings. The same careful study of posters and the same ingenuity in putting scattered evidence together that have enabled him in a series of articles to identify the owners of many houses in Pompeii, have been effective here, though sometimes, as when he emends the last words of C. I. L. IV, 1162 to read *iuvenes Veneri rog*(*ant*), he strains the evidence far. I feel inclined to question Dr. Della Corte's conception of the *iuvenes* as a *collegium*, presumably formed by a principle of selective membership. Though he rightly emphasizes the military character of the institution, he clings to the old idea that the *iuvenes* were a burial college, and thinks that the absence of evidence in the inscriptions of Pompeii for officers and details of organization is due to the fact that their place of burial has not yet been found. But since the appearance of Rostovtzeff's important investigation (*Römische Bleitesserae, Klio, Beiheft*, I, 1905) it has been clear that the *iuvenes* were to be compared not to the private burial colleges but to the *Augustales* and the *fabri*, organizations of a public character. Moreover, like these groups, the *iuvenes*, if we can judge from the inscriptions of other towns, seem not to have been called a *collegium* or to have had regular officers until the second century. The lack of evidence for a *collegium iuvenum* from Pompeii is then not at all strange; it merely confirms what we know of the *iuvenes* elsewhere. Their identification with the *collegia* who made trouble in the amphitheatre of Pompeii is therefore improbable. The iuvenes were made up of the free born citizens of the town who were preparing for the military service on horse and on foot which Augustus urged for all citizens. A relief from a Pompeian tomb (reproduced *Notizie degli Scavi* 1916, page 449, fig. 14), shows an armed horseman and a foot soldier in the entrance of a building which, Spinazzola noted, looks like the Armamentarium. These, I believe, represent the *iuvenes*, among whom the

citizens serving on horse—that is those possessing the equestrian census—and perhaps those having the necessary wealth to admit them to the *decuriones*, took a prominent part. The subject is one that I hope soon to discuss in another connection.

But these differences of conception have of course no effect on the value of this fresh contribution which Pompeii has made to the study of ancient institutions. Dr. Della Corte's work has enabled us to see in all its activity and life a form of training which in most towns we know only from bare unillustrated records. And since the conditions at Pompeii may fairly be considered typical of Italian towns, this new study has again brought home the fact, long ago insisted upon by Usener, that training in bodily vigor and manly exercise, which the Greek states regarded as essential for the citizen, was characteristic of the Italic peoples as well.

Lily Ross Taylor

Vassar College

Catalogue of the Greek and Roman Sculpture in the Museum of Fine Arts, Boston, by *L. D. Caskey*, pp. 233, 200 illustrations. Harvard University Press, Cambridge, 1925. $7.75.

Both in form and content this work is deserving of great praise. The thorough descriptions of the various sculptures are all accompanied by excellent illustrations. The type is large and easily read. The author brings to his task a detailed knowledge of the technique of ancient sculpture which makes his book something more than a catalogue.

The discussion of the Boston counterpart of the "Ludovisi Throne" is practically an article in which the various interpretations are summarized and the style analyzed. The conclusion reached is that certain features of the reliefs are most satisfactorily explained as the result of Polygnotan influence. In view of this conclusion it might have been observed that the shelving ground covered with pebbles in the "Ludovisi Throne" is not "stony soil" (page 44) but rather the pebbly shore of the sea. For the Polygnotan painting at Delphi of the taking of Troy, represented a stretch of seashore upon which could be distinguished pebbles (Paus. X, 25, 11). The presence of these Polygnotan pebbles in the relief favors the interpretation that the "Aphrodite" is rising from the smooth surface of the sea.

On page 76, the attribution by Dickins of the head of the youthful goddess from Chios to the Alexandrian school is questioned as well as the use of stucco to complete the work. A marble veil was attached to the sloping planes of the head. In the discussion of this work, the author has marshalled too many quotations.

The decorative pedimental relief of the fourth century (page 105) is the subject of interesting comment. Its elaborate floral arabesques are the forerunner of those of the Ara Pacis. It may be added that the fluted stalk of this relief is probably an elaboration of a fluted stalk like that of the acroteria of the Parthenon, and that the Eros seated on a tendril is a variant of the Eros that stands on a tendril in vase-painting of the fifth century.

George W. Elderkin

Princeton University

Elephants and Ethnologists, by *G. Elliot Smith*, with woodcuts by *A. Horace Gerrard* and *K. Leigh-Pemberton*, pp. 129, 52 woodcuts. E. P. Dutton, New York, 1924. $6.00.

This book is designed especially for the archaeologist and for those readers who have some knowledge of the art and culture of Egypt, Mesopotamia and Asia, as it takes for granted a considerable fund of information.

Mr. Smith will doubtless meet with opposition from conservative archaeologists because of his breadth of vision in tracing the spread of culture. His contention is that the culture of the New World, particularly in Honduras, while developing in a distinctive manner all its own, was nevertheless dependent on the civilization of Asia, and not of indigenous origin. His ideas are at times very startling, especially when he derives the stone pyramids of Copan, built in the early centuries of the Christian era, from the brick pyramids of Babylonia which, by the way, are not really pyramids. He also derives the "glory face" of Maya architecture from the Egyptian winged disc.

The author believes that these architectural and decorative designs travelled eastward in modified form to Indo-China, which is the source of Maya culture. On page 3 is an interesting chart suggesting the routes followed by the immigrants of the first twelve centuries after Christ on their way from Cambodia to Central America. Mr. Smith's theory is supported chiefly by the representation of an Indian elephant on stela B at Copan, which is drawn from every angle in the excellent woodcuts which illustrate the volume. The sculptor could not have seen an elephant in America, but was reproducing some earlier model brought from Asia. Additional evidence is the fact that a turbaned *mahout* is represented riding the elephant. Then, too, the curious convention of a scroll design below the elephant's eye appears in some representations of the Indian Makara and also on the elephant at Delhi Fort.

The question of the method of transferring the type is touched upon at various points in the book. Probably the medium of distribution was amulets and decorated vessels representing elephants and other mythical creatures common to eastern Asia and to America. While perhaps not entirely convincing the theories set forth in this volume are very suggestive and merit further investigation.

KATE McK. ELDERKIN

Princeton

ARCHAEOLOGICAL DISCUSSIONS[1]

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

Edward H. Heffner, *Editor*
University of Pennsylvania, Philadelphia

GENERAL AND MISCELLANEOUS

The Tomb of Alaric.—In *R. Arch.*, fifth series, XIX, 1924, pp. 195–207, A. van Gennep discusses the tale, given by Jordanes, that after the death of Alaric the Goths diverted the river of Barentin (Busento), made some slaves of war—whom they afterwards killed—dug a grave in the bed of the river, and buried the body of the king together with great riches. The reason given for killing the slaves is the fear that they might tell where the treasure was buried. That is a rationalistic explanation and is to be rejected; but the tale is in other respects to be believed, for examples of similar burials are found among primitive peoples, and the Goths, though Christians, were not far removed from their earlier beliefs and practices. The examples cited are from Africa and Australia.

Archaeology and the Photographer.—In *R. Arch.*, fifth series, XVI, 1922, pp. 85–110, W. Deonna writes of the service which photography is able to render to archaeology. The article is divided into sections as follows: Documentary Photography, Photography and the Appreciation of Styles, Composite Photographs, Color Photography, Photographs of Motion, the Cinematograph, the Photography of the Invisible, the Radiograph, Natural Photography (change of color produced by exposure to light), Photography and the Teaching of Archaeology, Photography and Esthetics. The titles of the sections indicate the scope of the article.

The Corpus Vasorum Antiquorum.—In *R. Arch.*, fifth series, XIX, 1924, pp. 280–294, E. Pottier replies to the favorable and unfavorable criticisms of the first issues of the *Corpus Vasorum Antiquorum*, explains the general policy of the editors, and announces some modifications in details.

The Cyclopes.—In *R. Arch.*, fifth series, XVI, 1922, pp. 119–127 (6 figs.), L. Siret explains the round eye of the Cyclopes as the circle of the crater of a volcano. Volcanic bombs, such as the Neapolitans call "tears of Vesuvius," have the shape given in art to the thunderbolt, and the Cyclopes forged the weapons of Zeus. Much the same shape is usual for the ingots formed in primitive forges, and stones or bullets for use in slings have the same form. But the eye of the Cyclops was also the hole in a hammer in which the handle is inserted, filling (and thus blinding) the eye, as the staff inserted by Odysseus blinded the eye of Polyphemus.

Persian Standard of Coinage in Ionia.—The reversion from the Rhodian to the Persian standard in the case of certain Ionian cities in the period 320–280 B.C., earlier mentioned (*Num. Chron.*, 1922, p. 169) by G. F. Hill, is subjected to more

[1] The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor Heffner, Editor-in-charge, assisted by Professor Samuel E. Bassett, Professor C. N. Brown, Miss Mary H. Buckingham, Professor Sidney N. Deane, Professor Harold N. Fowler, Dr. Stephen B. Luce, Professor Elmer T. Merrill, Professor John C. Rolfe, Professor John Shapley, Professor A. L. Wheeler, and the Editors.

No attempt is made to include in this number of the Journal material published after December 31, 1924.

For an explanation of the abbreviations, see pp. 115–116.

detailed examination by J. G. Milne, and explained by reference to the history of the period (*Num. Chron.*, 1924, pp. 19–30).

The Religious Policy of Antony and Cleopatra.—In *R. Arch.*, fifth series, XIX, 1925, pp. 241–261, H. Jeanmaire discusses the religious policy of Antony and Cleopatra, showing that there was a real significance in the adoption by Antony of the name and attributes of Dionysus. His conduct is known to us only by reports of those who favored Augustus, and the serious meaning of it has been hidden. The triumph of Augustus over Antony was also the triumph of Apollo over Dionysus.

Large and Small Bronzes.—In *R. Arch.*, fifth series, XIX, 1925, pp. 227–237, Salomon Reinach makes, and supports by examples and arguments, the two following statements:

1. In the Greco-Roman period plaster moulds were made only of bronzes, and these were thus faithfully copied in marble.

2. In the Greco-Roman period, be it on the Rhine or on the Danube, there are virtually no examples of bronzes, large or small, which are faithful reproductions of marble or chryselephantine originals. Statues of Aphrodite crouching and Aphrodite standing or removing her sandal are shown to be only apparent exceptions. If the two statements are correct, any bronze copy of an ancient statue the original of which was of marble must, *a priori*, be considered modern. On the other hand, when a bronze statuette reproduces the type of a statue which is known to have been of bronze, there is a strong presumption in favor of its authenticity.

DELOS.—Chronology of the Archons.—In *B.C.H.*, XLVII, 1923, pp. 450–454, Maurice Lacroix discusses the chronologies proposed by Glotz (*B.C.H.*, XLIV, 1920, pp. 362-366) and Dürrbach (*ibid.*, XL, 1916, pp. 346–352) taking issue with the results obtained by these scholars, and considering that the chronology of the Delian archons previous to 310 B.C. is full of uncertainties. At the end of the article a list of archons, with tentative dates, is appended.

Fanum and Simulacrum; Nemed and Minihi.—In *R. Arch.*, fifth series, XX, 1924, J. Loth, in connection with a passage in the life of Saint Samson, discusses the words *fanum* and *simulacrum* used there. He interprets the latter as *menhir* and *fanum* as Celtic *nemeton* (Irish *Nemed*, Breton *Minihi*), a sacred precinct of circular form in the woods. These became associated with Druidism, but the *nemeton* is earlier than Druidism, which was a synthesis of rites and traditions of various periods and races.

The Frequency Table as a method of studying the weights of ancient coinages is described and discussed by G. F. Hill in *Num. Chron.*, 1924, pp. 76–85, with a note on the exactitude of ancient weighing.

The Word Iubilator.—In *R. Arch.*, fifth series, XIX, 1924, pp. 24–28 (fig.) R. Cagnat discusses representations of Roman chariot races in which, besides the chariots, with their horses and drivers, riders on galloping horses are represented. The designation and function of these riders are unknown. The word *iubilatore* under one of the chariot horses in the relief published by Panvinius (*Galler. di Firenze*, ser. IV, pl. XCVII) is the name of the horse and has nothing to do with the riders. Other examples are given of the custom of giving the names of the horses in the ablative case, and those of the drivers in the nominative.

EGYPT

The Age of Copper in Egypt.—In *R. Arch.*, fifth series, XX, 1924, pp. 1–20, Edouard Naville shows that the word read *ousem* signifies copper. This was used in great quantities by the Egyptians and was brought from Punt, *i.e.*, from southern Arabia. It was introduced into Egypt by a conquering Hamitic race

from Arabia, and to these conquerors, who came, not from the North, but from the South, and were not Semitic, is due the invention of the hieroglyphics and of many other elements of Egyptian civilization. The early inhabitants of Babylonia also may have obtained their copper from southern Arabia, and may possibly themselves have been of Hamitic stock. Apparently civilization is earlier in Babylonia than in Egypt, though this is not certain.

ASIA MINOR AND AEGEAN

BROUSSA.—A Greek Inscription.—In *B.C.H.*, XLVIII, 1924, pp. 1–57, and pl. I, MAURICE HOLLEAUX publishes and comments upon an inscription found at Broussa in 1921, in the foundations of one of the towers of the Byzantine city wall, and made known through the interest of M. Papadopoulos, the director of the Greco-French academy at Pera. It was the subject of a brief comment by TH. HOMOLLE, in *C.R.A.I.*, 1921, pp. 269–273. Since then, a squeeze and better photographs of the inscription have become available, through the industry of M. Papadopoulos. It is cut on a slab of white limestone, and is thirty lines in length. The letters are most uneven in size: the forms and the manner in which they are cut place this stone in the Hellenistic period, not earlier than the last quarter of the third century B.C., and probably later. The text is a decree of the citizens of a city not mentioned, in honor of a certain Korragos, a Macedonian, the strategos of the regions around the Hellespont, for his intercession with the king on their behalf, and for benefits conferred upon them, after they had been left destitute through the effects of a war. The name Korragos is unusual, occurring in not more than fifteen other instances. The mention of the Hellespont recalls the satrapy of that name in the Seleucid kingdom; but for various reasons, as is shown, this man was probably an official of the kingdom of Pergamum, and held office either under Attalus I, or else under Eumenes II or Attalus II. After an exhaustive comment on the text an attempt is made to identify the city, and Apollonia on the Rhyndacus is suggested, as the inscription, if it is Pergamene, antedates the foundation of Prusa, the ancient city on the site of Broussa. The writer expresses the conviction that the Korragos in the inscription is the man of the same name, of whom mention is made in Livy, XLII, 67, 3, who is described as a "praefectus Eumenis" in the year 171 B.C.; *praefectus* being the usual Latin translation of *στρατηγός*. The war mentioned is considered by the writer to be either the second between Pergamum and the Gauls, or else that with Prusias II of Bithynia. In conclusion the importance of this stone as a contribution to our knowledge of the economic and financial life of the Hellenistic period is emphasized.

The Delion of Paros.—This sanctuary, which goes back to prehistoric times, lies on a hill across the harbor northeast from the ancient city. In the first building period it was a nearly square, well-walled enclosure containing rock altars to Apollo and Artemis, but no temple. In the first half of the sixth century B.C. a small Doric temple was built over the altar of Artemis, with a new altar, and at the same time a large dining hall, *ἑστιατόριον*, for the festival banquets of the priests. The chief seats of worship remained at the rock altar of Apollo, around which the sacred dances were performed. A terrace giving a view of Delos was the outlook where the fire-signal from Cynthus for the beginning of the festival was received. Most of the marble remains have disappeared in modern lime-kilns, but a few heads have been found which bear a marked resemblance to those of the pediments at Olympia. The vases, beside a few prehistoric and Minyan sherds, run from mid-Geometric to early Corinthian styles, and in conjunction with the earlier wares found on the acropolis of the island, form a complete historical series. A great number of votive plates, both of pottery and

later of marble, were apparently offered by those who partook of the public banquet. They include varieties similar to those found in the Heraeum of Delos and in Rheneia, and polychrome plates like the well-known example from Thera. The small finds are bone and ivory fibula plates, and scarabs and other objects of Egyptian character, such as were made in Naucratis in the first half of the sixth century. There are also many terra cotta figurines like those found in Samos, Rhodes, and the sanctuary of Eileithyia in Paros, of the stock patterns made in Ionia as votives for female divinities. They bear witness to the existence of the cult of Artemis down to the fourth century. O. Rubensohn, *Arch. Anz.*, 1923/24, pt. 1/2, cols. 118–122.

GREECE

ARCHITECTURE

ATHENS.—The Temple of Rome and Augustus and the Erechtheum on the Acropolis.—In *R. Arch.*, fifth series, XIX, 1925, pp. 223–226, G. A. S. Snijder gives a summary of an article published in Dutch (*Mededeelingen van het Nederlandsch Historisch Instituut*, Rome, III, 1923, pp. 73–112). The differences between the architectural members of the temple of Augustus and Rome and the Erechtheum are due to intention, not merely to imperfect imitation. In the temple of Augustus and Rome the effect of weight is aimed at, whereas the Erechtheum produces the effect of lightness.

The Architect Callicrates and the Eastern Wall of the Acropolis.—In *R. Arch.*, fifth series, XIX, 1924, pp. 174–178, Paul Graindor discusses the inscription *I.G.*, I, Suppl., p. 140, 26a (Dittenberger, *Sylloge Inscriptionum Graecarum*, latest edition, No. 62). He proposes to read line 1: . . . [τ]ὲν πόλιν [κ]αθ' ἕ[ο ἀπ]|οικοδομε̃ται and to translate "close the Acropolis by a wall at the east." He explains that Callicrates was to close the breaches made in the wall for bringing in the materials for the Parthenon, now that the building was virtually finished.

The Origin of the Corinthian Capital.—In *Art Bulletin*, VI, 1924, pp. 75–81 (31 figs.), H. L. Ebeling studies the development of the Corinthian capital, the only member of the Corinthian column which differentiates it from the Ionic column. A résumé of the past contributions to the study is first given, and then there is an attempt to trace the steps by which Ictinus developed the design in the Phigalian capital. In all previous attempts to explain the Corinthian capital little or no attention has been given to the Phigalian example, which is generally accepted as the original invention. This has an unorganic, experimental appearance, and would seem to have been a development out of the volute capitals, with which it had to appear in the Phigalian temple. In the drawings of the Phigalian capital the character of the leaves is not clear, but even if the acanthus was represented, another creative genius, possibly Callimachus, is responsible for the full revelation of the beauties of the acanthus plant, which led finally to the intricate profusion of the Lysicrates monument and the practical simplicity of the Epidaurus capital.

DELPHI.—The Tholos of the Santuary of Athena Pronaia in the Marmaria.—A note on this building, by J. Charbonneaux, prior to his detailed publishing of it in the *Fouilles de Delphes*, appears in *B.C.H.*, XLVIII, 1924, pp. 209–216 (1 fig.). The argument of Karo that it was erected on the foundation of an earlier edifice, is proved not necessarily to be the case. The examination of the remains of the building reveals the extraordinary mathematical precision with which its walls were constructed, and its columns, both exterior and interior, placed. The exterior columns were twenty in number; they were Doric, and each had twenty flutes. The coffers of the ceiling were lozenge-shaped, to harmonize with the round plan, and were arranged in concentric circles, the angles of the apices of the coffers increasing in acuteness as they approach the centre. The interior order

was Corinthian, the columns being engaged in the cella wall. The epistyle which they supported was apparently of wood, and not of marble, as POMTOW supposes, whose statements (*Klio*, 1912, p. 190 ff.) regarding this building are mentioned only to be rejected.

The Date of the Heraeum at Olympia.—This subject is discussed by W. DOERPFELD in *Ath. Mitt.*, XLVII, 1922, pp. 25–47 (*Alte und Neue Ausgrabungen in Griechenland*) in a report of recent excavations in many parts of Greece, which he visited in 1922. Doerpfeld made some slight excavations in and near the Heraeum, and found confirmation of his view (*Ath. Mitt.*, XXXIII, 1908, p. 185) that the temple was first built in the eleventh century, 400 years before the date assigned by Furtwängler, and by most archaeologists after him. There were two reconstructions of the temple, each at a slightly higher level than that of the preceding building. The earliest structure (Temple I), which had no peripteros, was destroyed by fire. On its site another (Temple II) was built, with much the same ground plan as Temple I, except that the opisthodomos did not extend so far to the west, and with columns along the sides. Temple II was apparently torn down and rebuilt into Temple III, at a still higher level, because of the desire to keep its lower courses from being covered with the earth which rains brought down from the Cronion. The columns of Temple II, and of Temple III, at first, were of oak. As the latter decayed they were replaced by stone columns. Since the earliest stone columns belong to the seventh century, and since columns of oak would last several hundred years, Doerpfeld concludes that Temple I is as early as the eleventh century.

The small finds in the strata of the three temples corroborate this view. Of the three temples and terra cottas recognized at Olympia by Furtwängler (primitive, geometric, orientalizing) the first two are represented by great quantities of finds below the level of Temple I, but rarely in the two higher strata, *i.e.*, of Temples II and III. On the other hand, of the vase fragments, the orientalizing or Proto-Corinthian sherds are found not only in the strata of all three temples, but a few samples came to light from under the level of the earliest temple. The absence of geometric pottery Doerpfeld explains by regarding the Proto-Corinthian as "a direct daughter of Mycenaean art." The latter was Sidonian-Phoenician, belonging to the second millenium B.C., whereas the recognized later Phoenician art is of the first millenium. The geometric art, as represented by the finds at Olympia, Athens, and elsewhere, is the native art of the second millenium, and exists contemporaneously with Mycenaean and Proto-Corinthian. The Doric Temple was a development of the native megaron, but owed its architectural decoration partly to Mycenaean, that is, to Phoenician, art.

Doerpfeld thinks that the stone lion's foot (*Ath. Mitt.*, XXXI, 1906, p. 210), found under the level of Temple II, in the débris of the burned Temple I, very probably belonged to the cult statue of Hera seated on a throne, possibly the statue whose very archaic head is preserved. Hence both temple and seated image existed before some Homeric critics admit, and the reference to temples and seated statues of the gods cannot be used as evidence of a late stratum of the Homeric poems.

Further excavations between the Heraeum and the Metroön confirm Doerpfeld in his belief that on the site of the great Roman waterworks of Herodes Atticus was originally a natural spring with a Greek spring house. Here Doerpfeld places the oldest cult at Olympia, and dates this at the period of the apsidal houses, roughly about the time of Troy I, and going back as far as the third millenium B.C.

SCULPTURE

The Agias of Lysippus.—In the *Revue Belge de Philologie*, January–March, 1924, PHILIPPART follows Wolters (1913) in believing that the monument dedicated

at Delphi by Daochos is earlier, not later, than that at Pharsalus, and that the Agias at Delphi has nothing to do with Lysippus. To this S. R. (*R. Arch.*, XX, 1924, p. 239), in his brief mention of Philippart's article, does not object, but he does object to depriving Lysippus of the Apoxyomenos in Rome and suggests that the lack of replicas may be due to some edict forbidding the taking of casts from the original and that this marble copy may have been made at the order of Tiberius when he placed the original in his palace.

DELPHI.—The Offerings of the Deinomenids.—In *B.C.H.*, XLVII, 1923, pp. 420–430, E. Cavaignac discusses the restoration proposed by Pomtow in Dittenberger's *Sylloge* for the weight, which is there given as fifty talents of gold, of the tripod and golden statue of Nike dedicated by Hieron at Delphi. This reading is denied both by comparison with the weight of the tripod of Gelon, known to be of sixteen talents, and on the grounds of probability. By a study of the actual bases of these tripods, and of the cuttings for the attachment of the tripods, the approximate height can be obtained, and from this height the total weight of the offerings of Hieron can be arrived at. We have reason to believe, however, that the offering of Hieron was of somewhat greater weight than that of his brother Gelon, and the reading "twenty-one" is offered as a solution, and defended on epigraphical grounds. The number "fifty" is shown to apply to the total weight of all the offerings of Gelon and his brothers. This leads the author to strive to account for the immense spoils of war represented by these dedications, principally derived from the sale and ransom of prisoners captured from the Carthaginians in the battle of Himera (481–480 B.C.) and the indemnity collected from Carthage at that time, and material of war captured then. The superior weight of the offering of Hieron is explained by suggesting that his tripod represented not only that battle, but the battle against the Etruscans at Cumae (474 B.C.) and a levy on the internal resources of the Syracusan state, some discussion of which is given. The trustworthiness of the ancient literary sources is favorably commented on in conclusion.

DELPHI.—Sculptures of the Treasury of the Athenians.—In *B.C.H.*, XLVII, 1923, pp. 387–419 (pls. XIV–XVIII, 9 figs.), P. de la Coste Messelière presents the results of a detailed examination of these sculptures, made in 1922. In the course of this investigation it was possible to put in their proper places one hundred and twenty-one fragments known to belong to this Treasury, but hitherto unidentified. Of these, ten fragments are shown to belong to pedimental sculptures. This has been confirmed by the architectural researches of Replat, who has found on the horizontal geison blocks cuttings for the bases of statues. A comparison with the figures on the temple at Aegina is suggested. Each of these fragments is discussed, and its proper place in a pedimental group suggested, and a restoration of the whole is given, which is conjectured to portray Heracles and Iolaus in the presence of Zeus, Athena, and other divinities. Eighty-eight additional fragments have been identified as belonging to metopes; they are distributed among nineteen of the twenty-four known examples, and six others, making the complete number belonging to the building. Among the additions to the metopes already known, the most significant is the head of Theseus to the southern metope showing Theseus and the Minotaur. The six new metopes have been identified as Theseus and Sinis (on the south; the torso of Sinis is identified); Heracles and a Giant (?); Heracles and an Amazon; Heracles, Iolaus, and probably the Hydra; Heracles and Diomed (?) (all these on the north); and the chariot of Heracles (on the west). After a careful examination of the Treasury and the metopes, the author declares himself able to assign each one to its exact position on the building, and each metope is given its place by a number. On the north, nine, representing the exploits of Heracles; on the south nine, showing the exploits of Theseus; on the east six, showing combats of Greeks and Amazons; and on the west six, showing the

capture of the cattle of Geryon. Finally, an attempt is made to put in their places the two mounted Amazons, formerly considered as acroteria. Fragments recently discovered prove the existence of a third of these, showing that they cannot be so regarded; and an examination of the Treasury shows that it never had acroteria. The conclusion is reached that they belonged to some construction not to be identified surely, built in association with the Treasury, and at the same period. In conclusion the writer suggests certain problems offered by the technique of the sculptures, and states that a date after 490 B.C. must be assigned to them.

PIRAEUS.—An Eschatological Representation on an Attic Stele of the Fourth Century.—In *R. Arch.*, fifth series, XX, 1924, pp. 37–46 (pl.) G. A. S. Snijder publishes an Attic stele in the Museum of the Piraeus (*Attische Grabreliefs*, 1354; Reinach, *Rép. d. Rel.*, 409, 4) on which a large *loutrophoros* is represented, between the handles and the neck of which are two nude dancing youths. These are explained as satyrs, and similar figures on other gravestones are explained in the same way. The connection of Dionysus and his train with the life hereafter is discussed, and a votive relief in the museum at Chalcis (No. 337) is published, on which the figures of Hades, holding a cornucopia, and Dionysus, holding a cantharus, are accompanied by the inscription *τοῖν θεοῖν*. The mysteries of Dionysus offered the worshipers a happy life hereafter, hence the presence of satyrs and of Dionysiac symbols on monuments to the dead. This particular stele, of the fourth century B.C., is of unusually fine workmanship. A striking resemblance is noted between the satyrs on this stele and those on a Gallo-Roman stele at Arlon (Esperandieu, 4040; Strong, *Apotheosis*, p. 200; Reinach, *Rép. d. Rel.*, II, 161). Soon after the date of this stele the decree of Demetrius of Phaleron (317–316 B.C.) put an end to Attic funerary sculpture.

VASES AND PAINTING

Caeneus and the Centaurs.—In *R. Arch.*, fifth series, XVI, 1922, pp. 111–118 (fig.), Henri Boucher publishes and discusses the chief scene depicted on a red-figured celebe in the Saint Ferriol collection. Caeneus, wearing a helmet and, apparently, a cuirass and carrying a shield, is sinking into the ground. With his right hand he stabs a centaur between the fore legs. Behind this centaur is another holding a stone in his hand, as if to throw it. Behind Caeneus a bearded man, probably Peirithous, raises his sword against the centaurs. Behind him (*i.e.*, at the right of the picture) is a third centaur carrying a great rock. Other similar representations are mentioned, the finest of which is on the vase at Harrow (*J.H.S.*, XVII, 1897, pl. vi, p. 294). In all these, except that on the Polygnotus vase at Brussels, the head of Caeneus is in profile to left, and in scenes with three centaurs there are always two at the left and one at the right. On the other side of this vase is a presentation scene, a maiden standing between two youths.

DELOS.—An Altar Painting.—In *B.C.H.*, XLVII, 1923, pp. 455–487 (2 figs.) Marcel Bulard republishes a painting found in 1912 on an altar associated with a house in the Stadium quarter of Delos, the paintings from which were published in *B.C.H.*, XL, 1916, p. 207 ff. This fresco represents a goat-footed god standing between two palms, and playing a great syrinx, which conceals the lower part of his face and most of his body. Originally identified as Pan, the suggestion is made that this deity is really the Roman god Silvanus, as the paintings associated with it are of Roman date and the subjects are Roman in character. The cult of Silvanus in Roman domestic religion is discussed at length, and it is shown that he is given the attributes of Pan quite early in Roman religion. He is very apt to be associated with the Lares in the home worship of Roman families, and assumes the function of guardian of the limits of the house. In conclusion the writer brings

into connection with this painting a relief found at Ostia, and a wall-painting from a lararium at Pompeii, where Silvanus is seen in much the same manner of representation as on the Delian fresco, and where his identification is most probable.

Finds East of the Heraeum at Olympia.—In *Ath. Mitt.*, XLVII, 1922, pp. 48–52 (*Einzelfunde in Olympia*, 1922), E. Buschor and B. Schweitzer briefly describe the objects found in trial trenches east of the Heraeum. I. About .90 m. to 1.50 m. below the present surface is a prehistoric stratum belonging to the period of the apsidal houses, and containing stone utensils, but no trace of metal. The vase fragments were mostly of coarse ware and crude shape. No Mycenaean ware was found and only a single *Mattmalerei* fragment. A small proportion of the sherds were incised, the incisions being filled with white; some were of fine greyish-blue ware resembling Minyan, and there were a few fragments of black polished ware. No clear stratum indicated an occupation of the site between the prehistoric and the historical periods. As the trenches approached the Treasuries, in the early Greek filling on which the latter were built the prehistoric and the historical remains were mingled together; an occasional prehistoric object was found in the levelings made when the Heraeum was built.

II. Immediately above the prehistoric level, in the strata belonging to the three successive Hera temples, the pottery is most nearly related to the Proto-Corinthian. It is apparently of local origin. Some iron was found; also votive offerings of clay and bronze, and, near the Treasuries, a bronze disk, 25 cm. in diameter, with a notched edge. Along with the finer pottery were fragments of unglazed ware like that of the chamber tomb at Mycenae excavated by Wace in 1922. Fragments of roof tile all show the technique of the best period of Proto-Corinthian. Practically no geometric ware was found.

Laconian Ware.—With the publication of two vases in the Hermitage Museum at Petrograd—a lacaena (L II) recently acquired from private possession and a cylix (L IV) already imperfectly known—O. Waldhauer discusses the development of this ware as a gradual modification of the Geometric emphasis on the structural character of form, through Oriental influences (whether directly from Egypt or brought through Samos) in the direction of a more living harmony of form and decoration and a naturalistic rendering of objects. He dates the lacaena toward the end of the seventh century. The proportion of the low, bulging body and the high, column-like member that rises from it is found in Camares and other pre-hellenic wares. The shape differs from the related cantharus in having horizontal instead of vertical handles and from its own derivative, the calix crater, chiefly in the absence of the high foot, which was originally a separate pedestal. The cylix, with deep bowl, high foot, and handles curving slightly upward toward the end, and with zones of clay ground alternating with white slip on the outside, belongs in the second half of the sixth century. The inner picture is a horseman in profile flanked by a flying demon and bird, with a bird and snake below and a snake in the ground segment. *Jb. Arch.*, *I*, XXXVIII/IX, 1923/24, pts. 1/2, pp. 28–37; pl., 3 figs.

MT. OLYMPUS.—In *Ath. Mitt.*, XLVII, 1922, 129 f., (*Eine antike Opferstätte auf dem Olymp*), H. Scheffel briefly describes the remains of a stone altar and some vase fragments of the later classical period found on a lower peak of Mt. Olympus, about an hour's walk to the south of the summit and 100 m. below it, perhaps belonging to the altar of 'Zeus on the Summit' mentioned by Solinus, *Polyhistor*, IX.

Portrait of a Girl.—In *R. Arch.*, fifth series, XIX, 1924, pp. 150–152 (fig.), Paul Graindor publishes a white marble bust from Melos in the National Museum at Athens. It represents a young girl, with thick hair, parted in the middle and arranged in the fashion of the time of Antonia, wife of Nero Drusus. Black color is preserved on the hair, as well as on the right eyebrow, eyelashes and

iris. These details, with the letters of the inscription on the base, fix the date about the beginning of the Christian era. The inscription reads: Ψυχὴ Στασίμου Θυγα|τεὸς Στασίμου.

INSCRIPTIONS

DELPHI.—An Inscription Pertaining to the Law against Piracy.—In *R. Arch.*, fifth series, XIX, 1924, pp. 208–214, EDOUARD COQ shows that the law against piracy, parts of which are given in an inscription from Delphi, cannot be earlier than 67 B.C. It cannot be of 74 B.C. and refer to Marcus Antonius, as Jean Colin (*ibid.*, XVIII, 1923, pp. 289–294) maintains, since it mentions a σύνταξις, or regulation, relating to the introduction of envoys to audience before the senate, which Cicero ascribes to Gabinius, and Gabinius was tribune in 68–67 B.C.

The Delphic Paean to Dionysus.—In *B.C.H.*, XLVIII, 1924, pp. 97–208, W. VOLLGRAFF presents the first part of a study of the inscription containing this celebrated ode. He dedicates his work to the memory of JEAN DE MOT, killed in action in the World War. The paean was written by the otherwise unknown poet Philodamus of Scarphe. It was first published by Homolle and Bourguet in *B.C.H.*, XIX, 1895, pls. XVI, XVII, with a commentary on the text by Henri Weil, who enlarged his work in his *Études de Littérature et de Rhythmique Grècques* (Paris, 1902). It has also been published by Arthur Fairbanks, in *Cornell Studies in Class. Phil.*, XII, 1900, pp. 139–153, who follows the text of Weil. It is shown that that text was not final, but was based on a preliminary study, and it is hoped that this article, based on a more recent examination of the inscription from squeezes, will be of use in the definitive publication of this paean in the *Fouilles de Delphes*. The readings for lacunae can often be determined by the fact that the inscription was written *stoichedon*, and consequently the number of letters to a line are known; the metrical scheme of the paean is also of aid in the restoration of missing words. The letter-forms show a date in the second half of the fourth century B.C., and the year 335 is suggested as the probable time of composition. Each strophe is taken up separately, the text of Weil being first given, followed by critical notes and emendations, which last, wherever made, are supported, when possible, by quotations from ancient writers, justifying the use of a word or expression, the same method being used to explain the meaning of difficult passages, of the reading of which there is no doubt. The fourth strophe is almost entirely lost. The greater part of this installment of the article is devoted to the third strophe, where the connection of Dionysus with the Eleusinian mysteries, as indicated in the text, is stressed in the commentary, in which it is shown that the Dionysus of this paean is not the god of wine, but rather the divinity of mysteries and Orphic beliefs, the "Iacchos" of Aristophanes's *Frogs* and elsewhere. A discussion follows of the initiation into these mysteries, in the course of which it is deemed desirable to republish Wilamowitz's text of the 26th Idyll of Theocritus with a complete commentary, in which the argument is advanced, on various grounds, archaeological and philological, that certain terms, found in this Idyll as well as in the Delphic paean, have reference to the degrees to which those who were initiated into the mysteries of the worship of Dionysus could attain, and which suggest that the poem of Theocritus was composed on the occasion of the initiation of a youth. The authenticity of this poem as a work of Theocritus, often attacked, and rejected by Wilamowitz, is defended and upheld, and the conjecture is made that it was written at Cos, where a cult of Dionysus is known to have existed, with mysteries comparable to those at Eleusis. In commenting upon the fifth strophe of the paean, the identification of the names Παιάν and Εὔκλης with Dionysus in the Orphic cults is established. The article, which ends with the fifth strophe, will be continued in a future number.

DELPHI.—Greek Translation of a Roman Law of the End of 101 B.C.—This

inscription, discovered at Delphi during the campaigns of 1893 and 1896 of the French School at Athens, and published several times since, is the subject of a paper by Gaston Colin, in *B.C.H.*, XLVIII, 1924, pp. 58–96, and 304 (additional note). The occasions for this article are those of Pomtow in *Klio*, XVII, pp. 172–173, where a transcription is given, the correctness of which is questioned, various mistakes being pointed out; and of Coq, in *C.R.A.I.*, 1923, pp. 129–150, with some of whose conclusions the writer disagrees, especially as regards his date of 67 B.C., for which the evidence is not sufficiently strong. The text refers to kings in Egypt, Cyprus, Syria, and Cyrene as friends and allies of the Roman people; in 67 the situation in these countries would not have warranted such a reference; as in Egypt, Ptolemy XIII was fighting for recognition of his right to the throne; the situation in Cyprus was very similar; Syria was in a condition of anarchy; and Cyrene was technically Roman, having been bequeathed to Rome by Ptolemy Apion in 96 B.C. The mention of Cyrene as an independent state indicates that the inscription must be earlier than that date, and it cannot be later than 101 B.C., and the date of *c.* 100 has been suggested by various commentators. It is suggested, however, that the more nearly correct period is the end of 101, when Marius was at the height of his power. The writer believes that in this inscription we should not merely see a law directed against piracy in the Eastern Mediterranean, but also against the growing power of Mithridates, king of Pontus. The text is republished, as restored by the writer, with a critical apparatus (pp. 79–83), followed by a translation and commentary. The article ends with a brief summary of the importance of this inscription as an historical document.

COINS

British Museum Acquisitions of Greek Coins in 1923.—These, as in former years, are described by G. F. Hill. Prominent among them is a tetradrachm of Morgantina (of the Syracusan Arethusa-type) of which only one, and a less well preserved, specimen has heretofore been known. There is also a series of coins from Cyprus which settle the attribution of a number of Imperial coins hitherto regarded as uncertain (*Num. Chron.*, 1924, pp. 1–18; 2 pl.).

GENERAL AND MISCELLANEOUS

The Cult of Aphrodite Epitragia and Its Connection with the Tragic Choruses.—In *B.C.H.*, XLVII, 1923, pp. 431–449, R. Ganszyniec discusses the curious cult of Aphrodite associated with a he-goat; sometimes she carries him in her arms, sometimes she stands beside him, sometimes she stands on his back, but more often she is represented as seated on his back, from which position the epithet is derived. A list of the known representations is given, showing that this form is by all means the most common. Of the origin of this cult there is considerable difference of opinion, but that it comes from the Orient seems probable. The interpretation of this cult and its meaning have been frequent subjects for discussion; even in the time of Pausanias its real significance had been lost sight of. It is suggested that the association of a he-goat with Aphrodite is probably a reference to her function as the patroness and protector of young men on their arrival at puberty, as youths who had reached this age were known as τράγοι, and the verb, "to reach the age of puberty," was τραγίζειν. This conception of the goddess seems to have been identical with Aphrodite Pandemos, whose importance has for a long time been recognized, and who has been successfully identified with Aphrodite Apaturos, worshipped at the feast of the Apaturia, when the enrollment of the youths in the phratries took place, signalling their passing from boyhood to puberty. It is regarded by the writer as probable that we must derive, therefore, the adjective τραγικός from the word τράγος in the sense of "ephebe" rather than "he-goat." It is pointed out that up to Hellenistic times, when the true origin of tragedy had

been lost sight of, the animal parts of satyrs are rather of horses than of goats—the pointed ears, for example, are quite as similar to those of horses. An attempt is made to prove that the literary references to the origins of tragedy point to a later tradition, and that the original tragic chorus was one of youths just arrived at manhood, celebrating their emancipation from boyhood in songs in honor of their patroness Aphrodite.

Greek Names Containing Names of Deities and Heroes.—In *R. Arch.*, fifth series, XIX, 1924, pp. 153–162, SALOMON REINACH discusses the names formed from names of deities and heroes and ending in *-doros* and *-dotos*. The thought of gratitude for the gift of the child does not appear. The names seem to be chosen as being of good augury. Names are avoided which suggest: (1) The idea of war or death, as Ares, Pluto, etc.; (2) The idea of gross sexual activity, as Priapus, Pan, etc.; (3) The idea of salt water, which is sterile, as Poseidon, Triton, etc.; (4) Names of abstractions, as Tyche, etc.; but names are chosen by preference from among those of the gods of the country or the family, among whom Demeter, Aphrodite, and Eros do not appear.

ITALY

COINS

Early Roman Coinage.—A paper read before the Royal Numismatic Society by E. A. SYDENHAM is thus summarized in its proceedings: "*Aes rude* was used by the people of Central Italy (including the Romans) probably till about the middle of the fourth century B.C. From about 450 B.C. to 275 B.C. bronze bricks (*aes signatum*) existed concurrently with *aes rude* and *aes grave*, but cannot be regarded as transitional from one to the other. The libral *as* (*aes grave*) was not introduced until after 335 B.C. Its nominal standard was probably Attic rather than Oscan. No reduction in the weight of the *as* seems to have been made before 275 B.C. Between 275 and 268 the weight of the *as* seems to have fallen rapidly. By the end of this period it was approximately that of a *triens* (4 ounces), but in practice it conformed to no fixed standard. Evidence shows that down to 244 B.C. *asses* of three or four ounces continued to be issued. The *denarius* (268 B.C.) was probably equivalent to ten triental *asses*. It seems probable, however, that actually the *denarius* bore no direct relation to the cast pieces, but was part of a new struck coinage, of which the bronze factors were *triens*, *quadrans*, *sextans*, and *uncia*. At first the *denarius* seems to have been issued only in small quantities. Until the Second Punic War issues of silver coins from the Roman mint appear to have been intermittent. Struck *asses* of the sextantal, or two-ounce standard, were introduced probably about 242 B.C." (*Num. Chron.*, 1924, Proceedings, p. 17.)

Legionary Coins of Victorinus, Carausius, and Allectus do not commemorate merely legions in their own armies, but are important "propaganda money," designed to compliment and tend to win over legions serving under rival authority elsewhere: so Sir CHARLES OMAN in *Num. Chron.*, 1924, pp. 53–68 (pl.).

Some Late Roman Mint-Marks.—Andreas Alföldy points out that *S M L A P* does not mean, as Sir Arthur Evans thought (*Num. Chron.*, 1915, pp. 433 ff.), *Sacra Moneta Londinii Augustae Prima* (sc., *officina*) on coins of Valentinian I and his colleagues, but the *L* is for *Lugdunum*, and the *A P* for *argentum pusulatum*. Similarly in the mint-mark *S M K A P*, the place is Konstantina-Arelate (*Num. Chron.*, 1924, pp. 69–75; 2 pl.).

Roman Serrate Coins.—H. MATTINGLY studies these issues in *Num. Chron.*, 1924, pp. 31–52 (2 pl.), dividing them into five classes. The first is of a single type (Roma-Dioscuri), assigned by Grueber to Italy, and dated *c.* 217–197 B.C. Mattingly thinks the mint possibly not Roman, and the date probably a little

earlier than the reduction of 217. The second class is of *c.* 125–115 B.C., and the third *c.* 106–101 B.C. (as against Grueber). The fourth is of 87–71 B.C., and the fifth of *c.* 71–49 B.C., but probably of the later years of that period. The serration was done by hand before striking, and its object was to inspire confidence in the purity of the metal. In the late Republic it was a part of the tradition of the Marian faction.

GENERAL AND MISCELLANEOUS

The Cult of the Lares.—In *R. Arch.*, fifth series, XX, 1924, pp. 21–33, R. Valois discusses the nature of the Lares. He concludes that the *Lar familiaris* is the deity of the family hearth, the *Lares praestites* twin guardians of the door (an altar with fire at each side of the door) and hence of the city gate, and the *Lares compitales* the spirits who presided over the disposal (by fire) of refuse. With this last rite a rural fire-cult may have been associated.

FRANCE

ORANGE.—The Friezes of the Arch.—In *R. Arch.*, fifth series, XIX, 1924, pp. 29–54 (6 figs.), Paul Couissin discusses the arms represented in the friezes of the arch at Orange. The Romans and their opponents are clearly distinguished, and their opponents are not Germans or Ligurians, but Gauls. The equipment of the Romans cannot be earlier than 50 B.C. or later than the time of Augustus. The arch was, then, erected in the second half, and probably in the third quarter, of the first century B.C. to commemorate a victory over Gauls. But among the trophies represented are some naval trophies of such character that they cannot refer to a victory over barbarians, but only to a victory in the Mediterranean. The conclusion is that the arch was erected, or begun, between 49 and 44 B.C. to commemorate the victories of Julius Caesar in his Gallic wars and in the Civil War.

SENS.—The Vicissitudes of an Equestrian Statue.—In *R. Arch.*, fifth series, XIX, 1924, pp. 132–136, Marc Bloch discusses a (now much mutilated) equestrian statue on the western façade of the cathedral of Sens. An inscription, now lost, as cited by Jean Golein, in 1372, read:

Regnantis veri cupiens verus cultor haberi
Iuro rem cleri libertatesque tueri.

Sponde (1640–1641) and local tradition declare that the statue represents Philip VI of Valois; Jean Golein gives it the name of Constantine; and the statue in Rome which was long believed to be that of Constantine is really that of Marcus Aurelius.

GERMANY

Bronze Statuettes in the Antiquarium at Berlin.—A selection of the more important among many additions to the collection of bronzes in the Antiquarium since the last publication Pernice, *Arch. Anz.*, 1904, 16 ff.) is given by K. A. Neugebauer in *Arch. Anz.*, 1922, 1/2 (cols. 59–119; 35 figs.). The sixty-six numbers include separate figures and those once attached to some other object, but no implements as such. They are classified as follows: Cretan-Mycenaean (3), nude male figures.—Geometric (2), upper part of helmetted warrior; dog carrying young in its mouth.—Archaic (23), nude youths, one carrying a ram; Hermes Criophorus; bearded men with pointed hats, both nude and draped, some carrying rams under the left arm; Ionic female figure wearing long chiton; man wrapped in chiton and mantle, Ionic work; reclining man; Zeus hurling the thunderbolt; eagle; snake rolled in a hoop; snake rearing its head, inscribed on the back ΙΑΡΟΣΕΜΙΤΟ-ΜΕΛΑΙΨΙΟΤΟΠΕΛΑΝΑΙ; locust, probably an offering to Apollo, protector from pests; dancing nude warrior from a Hittite site in the Taurus; Scythian archer kneeling on a volute.—Fifth and fourth centuries (5), woman spinning;

resting maenad, probably from Tarentum; Poseidon standing; slave boy asleep, probably 4th century.—Hellenistic (6), boy (Dionysus?) riding on panther; athlete with right hand holding discus, left hand raised; goddess in archaistic drapery; upper half of bearded old man wearing mantle and garland of uncertain character, from Cairo; a pair of negro slaves, also from Cairo; naked, hump-backed beggar sitting on a rock like Alexandrian figures of fishermen, a vivid portrayal of extreme misery.—Italic (6), several archaic figures of nude youths such as are found on Etruscan candelabra; tall, slender figure of Heracles with the lion skin covering the back of his head and the left arm, local fabric of the fourth century; Athena hurling the spear, one of a number of such figures found in Umbria or Picenum; Gallic warrior fighting, fallen on the right knee.—Roman (20), standing youth, classicizing style, work of the imperial period; Jupiter enthroned, from Antium, one of a large number of replicas probably from the cult statue of the Capitoline Jove at Rome; head of a silenus, once silver-plated, excellent work; figure of Apollo laurel-crowned, with face suggesting the portraits of Claudian princes; carefully finished, classicizing, seated sphinx; Attis as a boy, with mantle buttoned down the legs, belly uncovered, hands crossed on the breast, Phrygian cap, the back made to fit against some upright object, second century A.D.; Mercury in long mantle, sandals, etc., with suspension ring on the top of his hat, one of many such figures in which the hair over the forehead suggests a Polyclitan original; Odysseus seated on an altar, in an attitude as if grouped with Penelope, Roman work but from an older model; Heracles with a tiny Telephus seated on his left hand, the father and child looking intently at one another; Athena with chiton, long mantle and snake-bordered aegis, casting the lot for Orestes; armed Athena in vigorous movement, from some Hellenistic original; zebu; parrot; pantheistic Fortuna with wings, elaborate headdress and attributes, slender figure; standing Aphrodite with diadem and with apple in left hand; upper part of an Aphrodite derived from the Medici type; genius of Jupiter Dolichenus; eagle perched on the head of a stag, a motive apparently of Hittite origin.

DENMARK

COPENHAGEN.—Gorgon and Lioness.—In *R. Arch.*, fifth series, XIX, 1924, pp. 267–279 (6 figs.), CHR. BLINKENBERG publishes a small cylix in the National Museum at Copenhagen. It is entirely black except at the centre, where a circular space is occupied by an apotropaic mask with great round eyes, great curved mouth, protruding tongue, and a beard. Weizsäcker (in Roscher's *Ausf. Lexikon der Mythologie*, III, p. 2394, 11) maintains that such bearded heads represent Phobos, and that similar heads without beards represent the Gorgon. Comparison with other monuments shows that in some instances the Gorgon is certainly represented with a beard. The beard of the gorgoneion is probably derived from that of the lion, or rather, since the Greeks often represented the lioness as bearded, of the lioness.

A Minoan Ring.—In *R. Arch.*, fifth series, XIX, 1925, pp. 262–266 (fig.), G. VAN HOORN publishes a Minoan ring in the National Museum at Copenhagen. It is of green jasper and was found in eastern Crete. On the bezel is a scene of worship. A goddess stands with raised hands which touch some zigzag lines intended, perhaps, to suggest clouds. At the left two standing women raise their hands in adoration, as do two kneeling men at the right. The shields of the men are beside them. Rocks and flowers indicate the scene where the apparition of the deity takes place. This ring is compared with the ring from Isopata. The kneeling posture is found but rarely in Hellenic art and only in representations of women. Perhaps the women of the classical period had retained it from the remote past.

RUSSIA

Ancient Marbles in the Moscow Historical Museum.—Ten pieces of Greek sculpture from southern Russia, now in Moscow, with two from the Hermitage in Petrograd, for comparison, are published with brief comments by O. WALDHAUER in *J.H.S.*, XLIV (1924), pt. I, pp. 45–53. A very archaic head of a youth, found at Olbia, is of coarse-grained marble resembling Naxian, and very much worn by water. It belongs to an Ionian, probably Milesian, "Apollo" figure. A very fine bearded head, seemingly of Pentelic marble, and probably from a herm, is an original Greek work of the middle of the fifth century, one of the ideal Attic types showing the influence of Phidias. The head of a bearded god, probably Asclepius, is a noble work of the fourth century. In the expression of pathos in the large, deep-set eyes, it resembles so closely the heads of Tegea as to suggest the hand of Scopas himself. The two pieces in the Hermitage, both found at Kertsch, are a head of Heracles almost identical in form with the Asclepius head, and a colossal torso in which the drapery and the technical quality closely resemble the statue of Mausolus, being evidently from the same period and group of artists. These two pieces indicate an epoch of brilliant prosperity for the kingdom of Bosporus under Leucon and Pairisades I (389–309), while the head of Asclepius shows a similar artistic culture at Olbia. Other pieces, chiefly from Olbia, are: a bearded head with holes for attaching a metal wreath, formerly incorrectly called a replica of the Epimenides; a small helmetted head of Pentelic marble, of the Meleager type, with holes for the attachment of cheek pieces; a female head with stephanê, an original Greek work of the early fourth century; a female head, also of Pentelic marble, and from the middle of the fourth century, which was apparently once set into a background as a relief; and a relief of a siren, full-face, of coarse local material and workmanship.

SPAIN

Legio VI^a Hispana.—Commenting on the inscriptions of Tiberius Claudius Dinippus at Corinth, published by L. R. DEAN (*A. J. A.*, XXII, 1918, pp. 189–197) HENRI SEYRIG attempts to reconstruct the history of this legion, of which, Dinippus was military tribune. It seems to have ceased to exist in 197 A.D., and it is suggested that the date of Dinippus's military tribuneship was in the neighborhood of 145 A.D. Sometime in the interval the legion disappears. Its formation was after 23 A.D., as it is not listed by Tacitus among the legions stationed in the Roman Empire at that time. From passages in the *Histories* of Tacitus and Suetonius's *Life of Galba*, it is suggested that it was recruited in Spain by Galba in the end of June, 68, and entered Rome with him in October of that year. In an appendix, the writer gives a list of the inscriptions in which this legion is mentioned, which, besides the ones from Corinth, come from various parts of the Roman world. (*B.C.H.*, XLVII, 1923, pp. 488–497.)

Tartessus.—At the July (1923) meeting of the Berlin Archaeological Society, H. SCHMIDT gave a summary of the history of ancient Tartessus as set forth in A. SCHULTEN's recent book of that name (Hamburg, 1922). The city flourished for about 500 years, (1000–500 B.C.), maintaining relations successively with the Phoenicians, Phocaeans, and Carthaginians, and fell a victim to the ambition of the last-named for exclusive control of the trade of western Europe, an ambition which laid the foundation for the latter conflict between Carthage and Rome. The total disappearance of Tartessus, Schulten connects with the Greek legend of Atlantis. An important discovery, one of the most extensive discoveries of prehistoric material made in Spain, is the recent finding in the harbor of Huelva of a sunken shipload of some 400 bronze articles of all sorts and from many sources—weapons, tools, ornaments, buckles, fibulae, chiefly of the latest west-European

bronze age, about 1000-800 B.C.—which were probably being taken to Tartessus to be melted up as material for the local work. *Arch. Anz.*, 1923/24, cols. 122–123.

EARLY CHRISTIAN, BYZANTINE, MEDIAEVAL AND RENAISSANCE ART

GENERAL AND MISCELLANEOUS

The History of Gestures.—In *R. Arch.*, fifth series, XX, 1924, pp. 64–79, S. REINACH traces the history of gestures, or rather of attitudes, in art. Frontality and stiffness prevailed in Egyptian art, and in Greek art until the fifth century, to be revived in the Middle Ages. Even after technical difficulties are solved, art refuses to represent many attitudes. Conventional postures for the Holy Family, and for galloping horses, are cited. The dependence of the Renaissance upon antiquity for certain attitudes, notably in the late Renaissance for the figure lying so as to show the back (an invention of the third century B.C.), is emphasized, and the *geste de tendresse*, an infant embracing its mother with both arms round her neck, is discussed at some length. This *motif* was introduced into art by Jan van Eyck. Instantaneous photography has already brought new attitudes into works of art, and its influence has as yet only begun.

Pregnancy Represented by Transparency in Christian Art.—In *R. Arch.*, fifth series, XIX, 1924, pp. 137–149, G. H. LUQUET discusses the representation in art of that which is invisible to the eye, and especially the representation in Christian art of the babe in the mother's womb. He gives a list of such representations, divided as follows: The Woman of the Apocalypse (2), The Virgin Mary (13), Saint Anne (8), The Visitation, with the transparency appearing in the Virgin and in Saint Elizabeth (4).

A Eucharistic Pyxis.—In *R. Arch.*, fifth series, XIX, 1924, pp. 238–240 (fig.), MAX PRINET publishes a little brass box which bears in mingled capitals and uncials the inscription:

Ecce salus mundi, verbum Patris, hostia pura,
Verus homo, deitas integra, vera caro.

This distich is found also, with slight variations, in two manuscripts of the early part of the thirteenth century. Inside, on the bottom of the box, is a rude representation of the crucified Christ. It is very seldom that eucharistic pyxides of the twelfth or thirteenth century are made of brass, whether gilded or not, without enamel; that they have an inscription on the outside; or that their interior is decorated with an image of the crucified Jesus.

The Ring in the Middle Ages.—In *R. Arch.*, fifth series, XIX, 1924, pp. 55–78 (13 figs.), LT. COL. DERVIEU discusses the ring in the Middle Ages. Some rings had a bezel, others had none; some rings were mere ornaments, others were used for special purposes, as engagement rings, reliquary or talismanic rings, rings of corporations, rings of investiture, and pontifical rings. The materials are gold, silver, and copper. Some early gold rings show traces of enamel, and some made in the fifteenth century are almost covered with enamel. Not many mediaeval rings are preserved, and information is derived in part from documents. It is difficult to distinguish mediaeval rings from those of later times. Several rings are illustrated and discussed.

Modena, Bari, and Hades.—In *Art Bulletin*, VI, 1924, pp. 71–74 (4 figs.), R. S. LOOMIS presents material for settling the controversy as to the date and precise subject of the archivolt on the Porta della Pescheria of Modena depicting a scene from Arthurian legend. The early dating of the work, that is, between 1099 and 1106, is confirmed by details of the armor worn by the Arthurian knights in the sculptured scene. The central theme of the relief, the clue which gives meaning

to the whole, is here for the first time interpreted by the identification of the two figures in the castle—Winlogee and Mardoc—as the Guinevere and Mordec of Arthurian legend. The story at Modena is therefore "an euhemerized version of a myth relating how, like Proserpina, Guinevere was carried off by the lord of Hades; how, like Orpheus, her husband set forth to bring her back; and how, like Hercules in the Alcestis legend, Gawain successfully struggled with Death and brought Guinevere back to her husband."

Spain or Toulouse?—In *Art Bulletin*, VII, 1924, pp. 3–25 (19 pls.), A. K. Porter writes a spirited critique of Mâle's recent publications on the Romanesque. He rejects the usual opinion, retained by Mâle, that Toulouse was the generating centre of Romanesque sculpture. Instead, he believes that first Spain and then

Figure 1. Inscribed Capital: Vézelay

Burgundy had priority over Toulouse, basing his argument on the evidence of the Beatus illuminations and the iconography of the Adoration of the Magi. He maintains against L. Folch i Torres, J. Serra y Vilaró, W. W. S. Cook, and others, that the Solsona Virgin is of the twelfth century and cites as parallel a mid-century tympanum of Salzburg. He denies the invention of a new symbolism to Abbot Suger, whom he considers, rather, to have diffused a symbolism already existing. Against Mâle and Deschamps, who has published an attack on Porter's chronology, he defends the eleventh century date of the inscription and sculpture of Santo Domingo de Silos. On the basis of an inscribed capital of the nave of Vézelay (Fig. 1) he defends his dating of Vézelay in the first third of the twelfth century, and he holds to his general theory of the spread of the Cluniac style.

ITALY

Roger van der Weyden.—In *R. Arch.*, fifth series, XIX, 1924, pp. 88–94, Domien Roggen, after citing the documents which prove that Roger was in Italy in 1450 and showing that the triptych described by Cyriacus of Ancona was painted

before Roger went to Italy and is now lost, discusses the three paintings by Roger connected with his Italian journey: the portrait of Lionel d'Este, the Madonna under the Pavillion (Städel Museum, Frankfort), and the Pietà in the Uffizi. The first shows no Italian influence; the picture in Frankfort has been connected with a painting by Fra Angelico in the Academy at Florence, but without sufficient reason; the Pietà shows a composition different from anything known in Flanders and so like that of a painting in Munich (No. H. G. 38*a*), attributed to Fra Angelico or his school, that Roger must have copied the Munich picture, though adding details of his own. An Entombment in the National Gallery, attributed to Michael Angelo, may have been inspired by the Munich painting and that of Roger. Several other paintings, chiefly miniatures, are briefly discussed.

The Linear Perspective of Leonardo da Vinci.—In *R. Arch.*, fifth series, XVI, 1922, pp. 55–76 (4 figs.), JACQUES MESNIL discusses linear perspective, especially as it is taught and practised in the writings and paintings of Leonardo da Vinci. Perspective may be a means of producing an optical illusion or a means of unifying and centralizing the composition. In the decoration of scenes for the theatre optical illusion is a legitimate end, and not in other paintings. The *Last Summer* of Leonardo is the most beautiful example of perspective employed as a means of unification and concentration.

A Study for Titian's Battle of Cadore.—In *Münch. Jb.*, I, 1924, pp. 20–25 (pl.; 3 figs.), E. BAUMEISTER describes a drawing of a group of horse and rider and fallen figure in the print collection at Munich, which has formerly been attributed to Tintoretto. It is decidedly not the work of Tintoretto. And it not only bears characteristics of Titian's style, but is fairly closely repeated in Fontana's engraving after Titian's painting of the Battle of Cadore, which was destroyed by fire. The drawing is a companion piece to a drawing of an equestrian group at Oxford, which has been attributed to Titian. The latter drawing is likewise to be considered as a study for a detail of Titian's painting.

A Romanesque Madonna.—In *Art Bulletin*, VI, 1924, pp. 103–104 (2 pls.), A. C. WEIBEL publishes a Madonna from a village church in the Abruzzi, which is now in a private collection in Rome. It is assigned to the same class of monuments as the Madonna of Presbyter Martinus, in the Kaiser Friedrich Museum, and the Madonna di Costantinopoli, in the parish church of Alatri. Like the others, it is carved out of a tree trunk, in the manner of the archaic Greek xoanon. In all three the Madonna is seated, holding the Child straight in front of her. But in the example here published the throne and lower part of the Madonna are missing.

ROME.—A View of the Septizonium of Septimius Severus.—In the Chapel of S. Ugone in the Certosa di Pavia, in a painting of the Madonna and Saints by Macrino d'Alba, the landscape background shows a corner of the Septizonium seen from the N. E., as well as a portion of the Basilica of Constantine. Painted in 1496, evidently from drawings made in Rome, the picture antedates the Renaissance drawings by which the building is known, and is of value for its reconstruction. It confirms the evidence of the ancient city plan for an extension of the main wall at this corner, instead of the column shown in the drawings. G. RODENWALDT, *Jb. Arch. I.*, 1923/24, pt. 1/2, cols. 39–44; fig.

The Picture Gallery of Andrea Vendramin.—A publication of the Medici Society, 1923, 41 pp. (72 pls.), reproduces the drawings in the catalogue of pictures owned by Andrea Vendramin in Venice in 1627. The facsimiles are accompanied by the text of the catalogue and a discussion of the catalogue by T. BORENIUS. The original catalogue is now in the British Museum (Sloane MSS. 4004). It contains eighty-six folios, with one hundred and fifty-five drawings of pictures in the collection, a short discussion of the history of painting during the classical period, attributions, and a list of pictures not reproduced. Most of the pictures are Venetian. They include a number of attributions to Giorgione, Titian, Bellini,

Carpaccio, etc. Out of the large number of drawings, Borenius has identified only four with extant paintings.

FRANCE

Lucretia Tapestries.—In *Art in America*, XII, 1924, pp. 291–296, (pl.), S. Rubinstein publishes a set of four tapestries in the collection of Mr. Felix Warburg, New York, representing four episodes from the life of Lucretia, wife of Tarquinius Collatinus, as told by Livy. Originally there must have been two or three other pieces, completing the story. The style of the costumes date the work about 1500, and, together with the type of personages and their grouping, proves a French origin.

PARIS.—A Funerary Statue in the Louvre.—In the Louvre is the recumbent statue of Blanche of Champagne, who died in 1283. Some of the accessories have disappeared. The work consisted of a wooden core on which the plates of beaten bronze were nailed; the head, hands, feet and cushion were cast in bronze; certain details were chiselled; and enamel was employed on parts of the cushion, for the girdle, and for parts which have disappeared. This is a work of the artists of Limoges, who were famous workers in enamel and are known to have made a considerable number of tombs. This is, however, the only monument of this kind in France, and only two are now known elsewhere, the monument of Aymar de Valence in the choir of Westminster and that of bishop Maurice at Burgos. (H. M., *R. Arch.*, fifth series, XIX, 1924, p. 415, from the *Débats*, February 17, 1924.)

SAINT DENIS.—Godefroid de Claire and Abbot Suger's Cross.—In *R. Arch.*, fifth series, XIX, 1924, pp. 79–87 (fig.), Marcel Laurent maintains that Godefroid de Claire, who made the great cross for Abbot Suger, did not derive his composition from Suger, but carried on the tradition of his native region of the Rhine and the Meuse. Suger started France on a path on which she was soon to distance all other nations—the ambo at Klosterneuburg, by Nicolas of Verdun shows that French influence was already strong in 1181,—but the goldsmiths of the Rhine and the Meuse were conservative, and their art eventually succumbed to the Gothic style of France. The opinion of E. Mâle, who gives Suger the credit for the composition of the cross, and the decoration of the cross itself, are discussed in some detail.

A Statuette of the School of Reims.—In *Art in America*, XII, 1924, pp. 202–211 (7 figs.), S. Rubinstein publishes a wooden statuette of an angel, which, though badly damaged, is still one of the very lovely examples of the work of the school of Reims. It probably comes from the same atelier which produced some of the angels and other figures on the cathedral of Reims.

The Beginnings of Romanesque Sculpture in Languedoc and Burgundy.—In *R. Arch.*, fifth series, XIX, 1924, pp. 163–173, Paul Deschamps in reply to C. Oursel (*ibid.*, 1923, May-June), discusses the sculptures of Cluny, Toulouse, Autun, Moissac, Vézelay, etc., and concludes that at the close of the tenth century and the beginning of the eleventh the two schools of Languedoc and Burgundy progressed side by side, each preserving its independence, though with various reciprocal borrowings. *Ibid.*, p. 413 is a brief summary, by S. R., of an article in the *Bull. Monum.*, 1923, in which M. Deschamps asserts the priority of the school of Toulouse.

GERMANY

Romanesque Sculpture in Southeastern Germany.—In *Münch. Jb.*, I, 1924, pp. 16–19 (3 figs.), H. Karlinger writes briefly of the style of the sculptural remains of the Solnhofen cathedral. There are three capitals and a medallion relief, all dating from the third quarter of the 11th century. The closest analogies

are with work at Quedlinburg and Regensburg. St.-Emmeran at Regensburg offers particularly close analogies, though the sculpture there is more monumental in conception. The style of the Solnhofen work is more in the spirit of the minor arts, especially ivory carvings.

BERLIN.—St. Jerome by Piero della Francesca.—In *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 201–205 (4 figs.), W. VON BODE publishes a painting of St. Jerome in a landscape, recently acquired by the Kaiser Friedrich Museum, which he ascribes to the early years of Piero della Francesca. The work is signed and dated 1450, and this inscription is believed to be genuine. Piero's St. Jerome with a Donor in the Academy at Venice is a good example for comparison with the Berlin canvas.

A Lost Altarpiece by Giovanni Bellini.—In *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 205–211 (5 figs.), D. F. VON HADELN suggests that a drawing by Girolamo Mocetto in the Dresden cabinet is a copy of a lost altarpiece by Giovanni Bellini. The composition represents the enthroned Madonna attended by saints. Sts. Peter and John the Baptist are closely similar to those characters in the half-length composition by Bellini and pupils, formerly in Dr. E. Simon's collection, Berlin. The St. John is repeated in a painting by Alvise Vivarini in the Academy at Venice. And a drapery study of the St. Paul, in the British Museum, which is to be attributed to Bellini himself, shows that Mocetto has misunderstood the drapery as painted in the lost altarpiece.

Some Upper German Drawings.—In *Münch. Jb.*, XIII, 1923, pp. 94–101 (6 figs.), E. BUCHNER studies several drawings in various collections which he finds are sufficiently similar to be considered the work of one hand. While the relationship of the style to that of Wechtlin is close, the drawings can hardly be assigned to him. The designation here suggested for their unknown author is the "Master of the Apostle Simon," in consequence of a characteristic page in the group (Fig. 2). The dates of all probably fall in the third decade of the sixteenth century.

FIGURE 2. DRAWING BY THE "MASTER OF THE APOSTLE SIMON"

Flemish Tapestries.—In *Münch. Jb.*, I, 1924, pp. 50–72 (14 figs.), A. VON SCHNEIDER discusses some of the Flemish tapestries in the unusually rich collection of that art in the Bavarian National Museum. Among them are series and single tapestries. Their high quality renders them of great artistic value, and in them one can trace almost the whole development of Flemish painting, especially that of Brussels, from the beginning of the sixteenth century into the eighteenth. There is only one gap in the progression. The baroque style of Rubens and his atelier is lacking.

Flötner Studies.—In *Jb. Preuss. Kunsts.* XLV, 1924, pp. 214–276 (2 pls.; 30 figs.), J. LOUIS SPONSEL connects Peter Flötner with the two most significant works of the early Renaissance in Central Germany, the castle of Duke George at Dresden and the Hartenfels castle at Torgau. The Gothic artists Schickentanz and Krebs have formerly been given the credit of being the architects for the two buildings, but the Italian Renaissance spirit which pervades the work is much more reasonably attributed to Flötner. Other architectural works in which he must have played the part of designer in some cases and of creator in others are the castle at Dippoldiswalde, the steps of the Rathaus at Oschatz, the round bay of the New Market at Dresden, and a bucket well from Lössnitz. In *ibid.*, pp. 121–184 (pl.; 40 figs.), the same author studies the question of Flötner's connection with works in Mainz and Halle.

A Madonna by Colijn de Coter.—In *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 117–120 (2 figs.), E. Hensler publishes a Madonna composition in a Rhenish private collection which adds a third to the signed works by Colijn de Coter. It is very closely similar to the Madonna in the Ryerson collection, Chicago, which Friedländer has attributed on stylistic grounds to this artist. The new picture gives another proof of Coter's proximity, as pupil or follower, to Roger, and it displays Coter's characteristics in their most mature development.

The Equestrian Monument of Emperor Maximilian.—In *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 212–213 (2 figs.), E. F. Bange discusses a bronze statuette of a horse in the Kaiser Friedrich Museum, which, by comparison with Burgkmair's sketch in the Albertina, is clearly proven to be connected with the equestrian monument of Emperor Maximilian, which was never completed. Like the sketch, the bronze statuette is to be dated not later than the beginning of the year 1509, and probably Erhart made the model for the statuette, even if he did not do the casting. The careful technique of the casting makes probable the hypothesis that the horse was cast for the emperor, who, after the failure of his plan, wished to have at least a model of the horse.

Rembrandt's Early Work.—While more recent critics of Rembrandt are busy depleting the list of works assigned to the master, W. von Bode, now in his eightieth year, publishes in *Z. Bild. K.*, LVIII, 1924, pp. 1–4 (pl.), a hitherto unknown painting, in the Berlin market, of two old men seated at a table, which he assigns, solely on the basis of style, to Rembrandt's youth. One of the heads is closely similar to Rembrandt's early portraits of his father and the color is paralleled in the Jeremiah acquired for the Rasch collection in Stockholm from the Stroganoff collection. The latter painting is dated 1630. In *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 277–280 (fig.), K. Bauch attributes to the early years of Rembrandt the painting of the Expulsion from the Temple which is now in the Rumiantzoff Museum at Moscow, where it is classed as a school piece. One of the faces in the composition is strikingly similar to the one that Bode likens to Rembrandt's father in the canvas discussed above. Bauch also states the problems which demand solution before a clear understanding of Rembrandt's early work may be had.

Student Drawings Corrected by Rembrandt.—In *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 191–200 (pl.; 15 figs.), G. Falck publishes a number of drawings which he believes to have been made by Constantyn van Renesse and then corrected by his master, Rembrandt. Rembrandt has always left the successful parts undisturbed, but has made radical changes in other parts. Hitherto only one painting has been assigned to Renesse. Another is here added, a Kermesse scene in an American private collection, which has formerly been attributed to both Aert de Gelder and Ph. de Koninck. But its relationship to a signed drawing by Renesse makes his authorship quite clear.

The Early Works of Rubens.—In *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 185–190 (3 figs.), K. Bauch discusses the characteristics of the early works of Rubens, with special attention to his portraits. A portrait of a youth in the Munich collection of Albert Langen, which has formerly been attributed to Cornelis de Vos, shows the style of the youthful Rubens, and must date before 1604. The portrait of a woman, in the Hermitage, formerly attributed to Coello, must date about the same time. It is an example of Rubens' work done in Spain.

Group Altars in Hall and Swabia.—In *Münch. Jb.*, XIII, 1923, pp. 121–160 (42 figs.), M. Voegelen discusses a group of altars in Hall, in the neighborhood of this town, and in Würtemberg collections which differ essentially from other Swabian work at this time. They are similar in combining several scenes or groups in a triptych shrine, the central part of which is raised considerably above the side panels and has separate wings for covering it. The dates of the series (about a dozen examples in all) fall within a very short period, of about forty years,

beginning with about 1440. The most striking thing about the altars is their relationship to Flemish works, in form, in arrangement of scenes, in decoration, in narrative content, and in particular details. Yet the differences between the various altars is such that no two can be the work of the same hand. The exact source of the Flemish influence is not determined—there are several possibilities—but at least this group of altars seems to be the earliest work in Swabia showing this influence.

The Würzburg Madonna.—In *Z. Bild. K.*, LVIII, 1924, pp. 30–34 (4 figs.), O. FISCHEL publishes four photographs of the Würzburg Madonna taken in the last thirty years. They show better than any amount of discussion what is happening to many works all over Germany that remain under the jurisdiction of the Church. This Madonna has been repeatedly tampered with, painted, cleaned off, and repainted till it speaks very little of its original message.

SWITZERLAND

A Portrait by Botticelli.—To the list of portraits which W. VON BODE has already attributed to Botticelli, he adds another in *Jb. Preuss. Kunsts.*, XLV, 1924, pp. 113–116 (2 figs.). It is a portrait of a young man seen almost full-face. It is now in the Swiss market, but formerly belonged to the Florentine family of which the man represented in the picture was a member. The strong influence of Filippo Lippi upon Botticilli's portrait style is here discussed.

Swiss Glass.—In *Pa. Mus. Bul.*, XX, 1924, pp. 11–18 (3 figs.), A. E. BYE writes a third installment of the description of Swiss glass of the sixteenth and seventeenth centuries owned by the museum. Most of the panels previously described were of a personal character, while the larger examples here published are municipal panels, "Stadtscheibe," and a series of panels from a large cycle of the Passion of Christ. These last are from the Monastery of Wettingen, near Baden.

SPAIN

Two Altar-Frontals in the Barcelona Museum.—In *Art Bulletin*, VI, 1923, pp. 31–60 (45 figs.), W. W. S. COOK publishes the second division in his study of the earliest painted panels of Catalonia. The iconographical analysis of the subject matter and ornamental details of the two altar-frontals (Fig. 3) published in the present article involves the presentation of many interesting and hitherto unpublished manuscript pages, notably, pages from the Escorial Virgilanus and Aemilianensis, the Gerona Homilies of Bede, the Bible of Leon, manuscripts at Vich and Perpignan, and the Vatican Bible of Farfa. The iconographical feature of most interest is the globe-mandorla, a comprehensive study of which is here made. Its development is traced through the Hellenistic globe type, the Oriental mandorla, the Carolingian glove-mandorla (Tours, Reims, St.-Denis). The globe-mandorla in the two Barcelona antependia is found to be a distorted version of the St.-Denis type (developed in turn from the Latin globe type, the Eastern mandorla, and the Orientalized western version) and is therefore one of several proofs presented in this article of Carolingian tradition in the Romanesque art of Catalonia. Incidentally, the study shows the source of other *Majestas* types which appear in the art of Catalonia and Leon-Castile, thus demonstrating the eclectic and derivative character of mediaeval Spanish painting. Another interesting iconographical feature is that of the ball of the world held in the right hand of Christ. In the Gerona Beatus this is plainly labeled *Mundus*, so that there is no question of the Host or Eucharistic wafer, or any other interpretation. This is derived from Carolingian models, as is also the arc or segment of the earth-globe, which serves as a footstool for Christ in both Barcelona frontals. The two panels are obviously the products of the same atelier, if not of the same artist. They date about the middle of the twelfth century.

Figure 3. Altar-Frontal of Catalonia: Barcelona Museum

GREAT BRITAIN

Velasquez.—In *Z. Bild. K.*, LVIII, 1924, pp. 24–26 (3 figs.), A. L. MAYER attributes a portrait of a woman to Velasquez and a genre scene to Murillo, both at present in the London market. The portrait comes from the collection of Lord Dungannon. Its technique is so closely related to that of the portrait of Baltasar Carlos in the Boston Museum that the London picture is probably of the same date, 1631. While this new picture is given to Velasquez, one formerly attributed to him, the head of a man in the collection of Mrs. H. O. Havemeyer, New York, is relegated to the class of copies.

NORTHERN AFRICA

TUNISIA.—A Gnostic Intaglio.—In *R. Arch.*, fifth series, XVI, 1922, pp. 77–84, CH. BRUSTON offers an interpretation of the symbolic figures and the inscriptions on the intaglio found in Tunisia and published by A. Merlin in the *Bulletin Archéologique,* 1919, p. 216. The meaning seems to be that since Christ has received from God the sceptre of the world, the God of the Old Covenant is no longer to be considered a cruel lion who pitilessly mangles the sinner, but a disarmed and powerless warrior, not to be feared by those who have become new men through baptism and turning their gaze toward the glorified Christ.

UNITED STATES

DETROIT.—German Silver.—In *Art in America*, XII, 1924, pp. 199–202 (4 figs.), H. SCHMIDTZ writes of important examples of German silver work recently acquired by Mr. Ralph N. Booth of Detroit. Most of the pieces belong to the late Renaissance period, the second half of the sixteenth century and the first half of the seventeenth, when the silversmith's craft was at its height in Germany. One piece, at least, dates in the Gothic period.

POUGHKEEPSIE.—Panels by Piero di Cosimo.—In *Art Bulletin*, VI, 1924, pp. 99–102 (2 pls.), K. D. MCKNIGHT (K. McK. Elderkin) publishes two cassone

FIGURE 4. THE WANDERINGS OF ULYSSES BY PIERO DI COSIMO: VASSAR COLLEGE

panels at Vassar College, which she assigns on stylistic grounds to Piero di Cosimo (Fig. 4). The panels depict scenes from the Wanderings of Ulysses. The Return of Ulysses is the subject of an end panel from the same cassone and by the same artist in the collection of Mr. Stanley Mortimer, New York. The panels were attributed by Dr. Sirén to Francesco Granacci on the basis of two sketches in the

Stockholm National Museum. The relationship between the sketches and panels is here refuted, while a relationship with works by Piero di Cosimo is maintained.

WORCESTER.—An Early Florentine Madonna.—In *Art in America*, XII, 1924, pp. 211–215 (3 figs.), R. Henniker-Heaton attributes a Madonna recently acquired by the Worcester Museum to the author of a Madonna in the Jarves collection. Dr. Sirén has attributed the Jarves example to Ambrogio di Baldese. The similarity between the two pictures is unmistakeable. The one in Worcester is the more sensitive and lovely of the two.

NEWS ITEMS FROM THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

The outstanding event of this last month was the tragic death at Arta on March 18 of John Watson Logan, Markham Fellow from the University of Wisconsin. His funeral was held on March 21 in the English Church in Athens and was attended not only by his immediate friends in the School but by many Greeks as well, for all Greece felt the deepest grief at the tragedy.

The regular courses of the School ended March 3 and on March 4 an open meeting was held in the Library of the School. Mr. Hill gave a brief summary of the excavations at Nemea in 1924, Mr. Blegen described the finds made at Phlius later in the same summer and Mr. Fowler discussed two works of Greek Sculpture in the Cleveland Museum of Art, one a Myronian head very similar to the male head found at Corinth some years ago.

The British School held an open meeting on March 11 when their Director, Mr. Woodward, described the excavations at Sparta last spring. A brief account of these was given in an earlier letter to the Journal. The other Foreign Schools in Athens have had no open meetings this year but the German Institute celebrated its fiftieth anniversary on December 18 and as part of the program included a talk by the present Director, Mr. Buschor, on the sculptured remains of the early poros temples on the Acropolis. From these he would reconstruct twelve pediments in all, four with lions or lionesses, one with the Typhon, one with Heracles and the Hydra, one with the Triton, three with processions, one with the olive tree and the springhouse, and a twelfth with the Presentation of Heracles. For many of these Mr. Buschor has not only pieces of the sculpture but fragments of the raking cornice so that some idea of the proportions of the gables, may be obtained. The Acropolis in the sixth century must have been fairly well populated with shrines and temples to have fragments of twelve poros gables extant, but Mr. Buschor's belief is that some of these succeeded each other in rather quick succession.

By the second week in March the American School community was pretty well scattered, some of the students going on the trip to Prevesa, Nicopolis, Jannina, Dodona and Arta and were enroute to Thermon when they were turned back by the tragedy of the wounding of Mr. Logan. Other students were at the excavations at Corinth and the Argive Heraeum, for Mr. Shear began work at Corinth March 9 and has been excavating the area above the theatre. The remains here are very deeply buried and it is too soon to expect any results beyond a few scattered finds. Mr. Blegen has been excavating on the ridges near the Argive Heraeum since March 10 and has found a number of Mycenaean chamber tombs, containing some very fine pottery, bronze daggers (one inlaid), a bronze vessel and several spear heads. A few beads, buttons and a seal of the typical Late Helladic III type appeared and at higher levels were found some Geometric bronzes—a griffin's head and a small bull. These were conventionalized in style but are in extremely good condition. One of the most interesting finds was a painted fresco around the doorway of one of the tombs, showing a Mycenaean spiral design in good colors. Miss Cox is copying this before the colors fade from exposure. There appear to be other tombs on the same ridge and also traces of the walls of the prehistoric settlement were found on the terrace above the great temple. A deposit of good polychrome neolithic sherds turned up unexpectedly on the summit of one ridge—the first instance of this neolithic type in the Argive region.

Miss Goldman expects to resume excavations at her site, Eutresis, in Boeotia, soon after the Greek Easter, April 19.

Since my last letter, a few belated reports from the Greek archaeologists have come in. Mr. Philadelphevs conducted excavations last autumn near the Roman Nicopolis, on the road leading from Prevesa to Jannina and uncovered an extensive building which dates early in the sixth century A.D. This date is determined by an inscription giving the name of the archbishop who is known to have been a contemporary of the Byzantine Emperor Anastasius. Two years ago a small chapel was found with a splendid mosaic pavement consisting of panels with birds, fish and leaves of different shapes done in very beautiful colors. In this last campaign a great paved square opposite the chapel was cleared and to the right of it was found a portico with the bases of the columns still *in situ*, the columns themselves were lying on the ground, perhaps thrown down by one of the earthquakes frequent in this region, while many Corinthian capitals of the type used in early Christian times were found in the same area. From the numerous light colonnettes—trilova and dilova of Byzantine windows—Mr. Philadelphevs conjectures that this portico had a second story with a number of windows in it. The floor of the portico is paved with mosaic in excellent preservation. Apparently similar porticoes existed on the other sides of the paved court but these have not been cleared as yet. Mr. Philadelphevs considers that the building is either an elaborately decorated monastery or the residence of the archbishop. Its ecclesiastical character is determined not only by the inscription of the Archbishop but also by the finding of earthenware tiles bearing the emblem of the cross, and a sculptured cross on one of the architectural members.

On the east coast of Attica, not far north of Thoricus, Mr. Kotzias reports the discovery of an important Byzantine mosaic floor. It is a fairly large square, measuring apparently ten metres on a side. Within a series of borders done in various colors is a central panel in which is represented the figure of a nude youth, eighty centimetres high, in three-quarters view. He is represented as walking briskly, swinging his left hand behind him and pointing forward with his right at some object, perhaps a vessel of glass or clay. The head is poorly done and the features are barely distinguishable. The background is black and on it is the signature, somewhat awkwardly spaced ΕΠΟΙΗϹΕ ΒΛΑϹΤΟϹ. The mosaic probably forms part of a series of representations, which can only be revealed by further excavations.

E. P. B.

American School
Athens

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EDWARD H. HEFFNER, *Editor-in-charge*

****Books, pamphlets, and other matter for the Bibliography should be addressed to Professor* EDWARD H. HEFFNER, *University of Pennsylvania, Philadelphia.*

GENERAL AND MISCELLANEOUS

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THE E OF THE TEMPLE AT DELPHI

In the first century of our era there existed in the pronaos of the temple of Apollo at Delphi three large models of the letter E. One of these was of wood, one of bronze, and the third of some unspecified material gilded. It is described by Plutarch as *χρυσοῦν*, but we can hardly imagine it to have been of gold. The wooden E is said to have been the oldest of the three and to have been dedicated by the seven Wise Men of Greece. The bronze E was dedicated by the Athenians, though when or for what particular reason is unknown. The golden E was the offering of Livia, the wife of Augustus,[1] and here again we are not informed as to the occasion for its dedication. In fact further details as to the setting up of any of these three letters in the temple have not come down to modern times.

The three E's were evidently fastened up in the same part of the temple with the famous maxims of the Wise Men, *γνῶθι σαυτόν*,

Figure 1.—The Delphic E on a Coin of Faustina the Elder.

Figure 2.—The Delphic E on a Coin of Hadrian.

μηδὲν ἄγαν, etc., though it cannot be shown beyond dispute exactly where they were located. The maxims may have been placed upon the columns of the east portico, or on the walls inside the front porch; but one fact remains clear that the E's were not far from them.[2] Some evidence is obtainable from the field of numismatics. On certain coins of Delphi dating from imperial times there is shown the east façade of the temple of Apollo and between the middle columns a large E (Fig. 1).[3] Sometimes the two middle columns of the temple are omitted on the coin so as to make more room for the E

[1] Plut. *De Ei Delphico*, ch. 3.
[2] See Frazer, *Paus.* V, pp. 348 f., where the evidence for the location of the maxims is summarized.
[3] See Svoronos, *B.C.H.* XX, pl. XXVII, No. 12, and pl. XXIX, Nos. 17 and 18.

(Fig. 2).[1] The important position given to this letter on the coins proves, as Imhoof-Blumer [2] long ago pointed out, that it must be intended to represent the mysterious E of the temple. What is the significance of this E and how did it come to be set up in so conspicuous a place in this famous shrine of Apollo? That is a question which has been asked since antiquity and to which no satisfactory answer has yet been made. It is the purpose of this paper to show that there is available evidence which points to a solution of the problem.

In that miscellaneous collection of papers known as the *Moralia* of Plutarch there is one of some length devoted to this very subject. It is entitled Περὶ τοῦ ΕΙ τοῦ ἐν Δελφοῖς, and is written in the form of a dialogue with several speakers. In it Plutarch offers seven different explanations, all of which are fanciful and unsatisfactory, if not impossible. They are these: 1. That there were originally five Wise Men and that when others came to be added to their number they set up the E, the fifth letter of the alphabet, to show that there were really only five of them and not more. 2. That E is second in order of the vowels and the sun second from the moon in order of the planets; that the Greeks associated Apollo with the sun, hence the E symbolizes Apollo. Plutarch adds that the Delphians knew nothing of all this, but that they held the common opinion that neither the sight nor the sound, but the name only of the letter had some secret meaning. 3. That it stands for the conjunction εἰ meaning *if*, because people asked the oracle *if* they were going to be successful, *if* they should marry, etc. 4. That εἰ combined with γάρ or θε introduced a wish or prayer to the god. 5. That εἰ, meaning *if*, is an important word in logic. "If this is so, that preceded; and if this is so, that will follow." Apollo, he says, delights in this particle which philosophers use so frequently. 6. That E stands for the number five which has certain peculiar values in mathematics, in music and in philosophy, and that these can be shown to have association with Apollo. 7. That the letter stands for εἶ = *thou art*, to indicate that Apollo is eternal and unchangeable. This last explanation is accepted by Poulsen [3] in his recent book on Delphi.

It should, of course, be borne in mind that when Plutarch speaks of εἰ we must not imagine that he wishes to imply that two letters EI were set up in the temple. Eἶ was the ancient spelling of the fifth letter of the Greek alphabet to which we now give the name *epsilon*. When pronounced this name had the same sound as the Greek words meaning *if*, and *thou art*.

[1] *E.g.* on a coin of Hadrian, *B.C.H.* XX, pl. XXVII, No. 12.
[2] *Zeit. für Num.* I, 1874, pp. 115 f.
[3] *Delphi*, p. 149.

It is clear from these attempted explanations that Plutarch did not know what the E stood for, and, furthermore, that he could not find out what it meant though he was an official of the temple.[1] In other words, by the first century A.D. the significance of the mysterious letter had become lost. This implies that the E was very old. In 1913 F. Courby found in the inner sanctuary of the temple of Apollo, close to the spot where it must have been placed originally, a stone omphalos (Fig. 3) upon which are cut in archaic char-

FIGURE 3.—INSCRIBED OMPHALOS: DELPHI.

acters 7TT Λ ∂. The first of these he interprets as the mysterious E, and the other two as Γᾶ, the name of the goddess Earth. If this interpretation is correct, and it seems to be the only possible one, here is the earliest example of the E at Delphi. M. Courby would date this omphalos in the seventh century B.C.,[2] and M. Homolle would agree with him that it cannot be later.[3] It is thus as old as

[1] Plut. *An Seni Resp. Ger. sit*, XVII, 3.
[2] *C. R. Acad. Insc.* 1914, pp. 257 ff.
[3] *Fouilles de Delphes*, II, p. 77. After the three characters there is a broken place in the stone which bears some resemblance to a letter *z*, but it is not incised and cannot have anything to do with the inscription.

the temple which preceded the one dedicated by the Alcmaeonidae about 512 B.C. In fact M. Homolle regards it as the original omphalos, or to use his own words "il n'est autre que le plus antique et le plus vénérable des symboles de la religion hellénique, le véritable omphalos, le centre de la terre."

It is a well-known fact that the Greeks of historical times were aware that the shrine at Delphi was a very old one and that it was a holy place long before Apollo was worshipped there. Pausanias is repeating the accepted tradition when he says that it was originally an oracle of Earth.[1] He quotes from an old poem, the *Eumolpia* attributed to Musaeus, according to which Earth and Poseidon possessed the oracle in common. Earth, he says, gave her share to Themis, who surrendered it to Apollo. Poseidon gave up his share in exchange for the island of Calauria. Euripides in one of his finest choruses makes the infant Apollo take possession of the shrine by driving out Themis, whom he calls the daughter of Earth.[2] Aeschylus, it will be remembered, regards Earth and Themis as identical.[3] Such stories have a historical basis in so far as they imply that the worship of Apollo at Delphi succeeded the worship of an older divinity who, in classical times, was called Earth, that is, Γᾶ, or Γῆ, or Γαῖα, or Χθών.

How far back into prehistoric times the worship of this divinity at Delphi goes is not known. In the Homeric hymn to Apollo, II, 210 ff., we are told how Cretans came in their black ship from "Minoan Cnossus" and Apollo in the guise of a dolphin guided them into the Crisean Gulf.[4] After they had erected an altar on the shore he bade them burn their ship and then led them to Delphi to become his priests. Whatever the true significance of this tale it is clear evidence for a connection between Delphi and Cnossus at an early date—a connection which may be established in other ways.

But Delphi was inhabited even before Minoan times. In fact there were people living there, though apparently in no great numbers, as far back as neolithic times, as is proved by the discovery of a few stone axes on the site, and it is safe to assume that these people had a holy place of some sort. By the second millennium B.C. the population of Delphi had greatly increased and there are abundant evidences of Minoan and Mycenaean civilization. For example part of a stone rhyton in the shape of a lion's head [5] found in the

[1] X, 5, 5 ff. [2] *Iph. Taur.* 1234 ff.

[3] *Prom.* 209 f.

> *ἐμοὶ δὲ μήτηρ οὐχ ἅπαξ μόνον Θέμις,*
> *καὶ Γαῖα, πολλῶν ὀνομάτων μορφὴ μία.*

[4] The dolphin, it may be remarked, was sometimes represented on the coins of Delphi, evidently, as Head has pointed out, with reference to this story. See *Br. Mus. Cat. of Coins of Central Greece*, p. xxxii; also Babelon, *Traité des monnaies grecques et romaines*, I, 2, p. 987.

[5] See Poulsen, *Delphi*, p. 16; and *Fouilles de Delphes*, V, p. 3.

innermost part of the temple of Apollo is very similar to one found in the Palace at Cnossus. This vase almost certainly came from Crete. Mycenaean vase fragments and terra-cottas were found in abundance by the excavators in the temenos of Apollo; and to the west of the enclosure a Mycenaean cemetery was located. Furthermore a tholos tomb which contained among other things twenty-six fragmentary stirrup-cups was excavated at Delphi; and pre-Mycenaean vase-fragments are recorded by Fimmen [1] as being in the local museum. Further archaeological evidence might be adduced, but enough has been presented to prove that Delphi was an important centre in Mycenaean times. The stone rhyton shows that there was intercourse between Delphi and Minoan Crete before the fall of Cnossus; and further evidence may be found in the Delphian calendar which was clearly derived from Crete. It had a year of 355 days with a month added in the third, fifth and eighth years. The great Pythian festival was originally celebrated every eight years, or on the ninth according to the Greek method of reckoning, although this number was changed after 582 B.C. [2] The periods of nine years, however, continued to be prescribed for the three festivals known as the Stepterium, the Herois and the Charila [3] and for other matters connected with the sanctuary. It will be remembered that according to Homer [4] Minos ruled at Cnossus in nine year periods. This is not a mere coincidence, and we may feel safe in saying that this Delphian cycle of nine years is to be traced back to Minoan Crete.

With these points established we must next consider whether the knowledge that Delphi was in communication with Crete in Minoan times throws any light upon the solution of our problem.

The great divinity in the second millennium B.C. was a mother goddess worshipped in connection with a male consort not only in Crete but also in Asia Minor.[5] The pair were called by different names in different localities, and in some places the consort was much more important than in others. In Crete he was the Cretan Zeus, who was also the bull god and god of the double axe. The double axe was likewise the symbol of the goddess.[6] In classical times this goddess was known as Rhea, but how far back that name goes there is no means of ascertaining. Her worship was not widespread on the mainland of Greece, and she was regarded as distinct from Ge or

[1] *Die Kretisch-Mykenische Kultur*, p. 5.

[2] See Poulsen, *Delphi*, p. 15, and the references there given.

[3] Plut. *Quaest. Gr.* ch. 12.

[4] *Od.* XIX, 178 f.; see also Plato, *Minos*, ch. 12.

[5] For this divinity as an Earth goddess see Preller-Robert, *Gr. Myth.* 4th ed., pp. 54 and 638.

[6] See p. 245; also Evans, *Palace of Minos*, I, p. 477, etc.; and Miss M. C. Waites, *A.J.A.* XXVII, 1923, pp. 25 ff.

Gaia during the historic period.[1] At the same time there are good reasons for believing that the early Earth goddess of Delphi is really to be identified with her. Thus the Delphian Gaia has the serpent associated with her as does the goddess at Cnossus. She possesses an oracle and foretells the future as the Cretan goddess did at Phaestus.[2] Zeus is described as the son of Gaia, and at the same time he is the consort of Themis who is identified with Gaia; just as the Cretan goddess is accompanied by a divinity who is both son and consort. In fact the tradition that Poseidon and Gaia once shared in the possession of the oracle at Delphi may point to them as another example of the divine pair.

Still another point of contact between the great goddess and Delphi is to be found in the story told by Hesiod[3] that the stone which Rhea gave Cronos to swallow in place of the infant Zeus was located at Delphi.[4] Pausanias[5] reports that it was still there in his time. But more important still is the fact that there is reason to believe that the omphalos itself is of Cretan origin. In the *Palace of Minos*, I, p. 674, Sir Arthur Evans publishes a seal-stone in his own collection (Fig. 4) which has carved upon it what he regards as a rustic shrine with serpents. He says, "What certainly seems to be intended for serpents appear on either side. It looks, indeed, as if we had to do with a rustic shrine of the Snake Goddess." I agree with Sir Arthur in thinking that the artist intended to represent serpents, but the rounded object below the gable and apparently protected by the roof I take to be an omphalos. It is very similar to the representations of it in later times. At Delphi the omphalos was sacred to Gaia.[6]

FIGURE 4.—SEAL STONE FROM EAST CRETE.

In early art the great goddess is often accompanied by two lions, or she is holding two water birds,[7] and she was so represented on the mainland of Greece. Thus on a gem found at Mycenae[8] and pub-

[1] See Farnell, *Cults of the Greek States*, III, chs. 1 and 6.
[2] See *Ath. Mitt.* 1893, pp. 272 ff.; 1894, pp. 290 ff.
[3] *Theog.* 499 f.
[4] See Poulsen, *Delphi*, p. 19, "The stone of Kronos was anointed daily, and at each festival draped with unwrought wool. This testifies that the stone was a primitive image, and it is natural to conceive these two remarkable stone fetishes (*i.e.* the stone just mentioned and the omphalos) as the couple who originally ruled Delphi—Poseidon and Ge—whom the new religion had to take over, explain and work into its cult." Many years ago H. N. Ulrichs argued that the omphalos was a fetish of Gaia, *Reisen und Forschungen in Griechenland*, I, p. 78.
[5] X, 24, 6.
[6] See p. 246.
[7] See G. Radet, *Cybébé, passim.*
[8] *J.H.S.* XXI, 1901, p. 164, fig. 44.

lished in 1901 she is seen with her two lions. Again on two cornelian gems found in 1921 by A. J. B. Wace in a tomb at Mycenae [1] she appears dressed in a flounced skirt and open bodice with a rampant lion on either side. Above her head is a ritual object apparently formed of snakes from the centre of which rises the double axe. On a terra-cotta plaque also found at Mycenae she is shown with two water birds; [2] and again in similar guise on a gem found in the bee-hive tomb at Vaphio.[3] Furthermore she is represented holding two swans by the neck on a bead seal from Thisbe in Boeotia recently published by Sir Arthur Evans and dated by him about 1500 B.C.[4] This is proof of her presence in Greece in Mycenaean times. No such representation of her has yet come to light at Delphi so far as I am aware, but it is interesting to recall that according to some authorities the two birds which were on either side of the omphalos were swans, not eagles.[5]

All these facts taken together make it probable that the primitive goddess who possessed the shrine at Delphi before the advent of Apollo was really this great mother goddess, and that it is not unlikely that she came to Delphi from Crete.

FIGURE 5.—MINOAN GEM IN NEW YORK.

In the *Bulletin* of the Metropolitan Museum of New York for February, 1924, p. 36, there is published a Minoan gem (Fig. 5) which is of peculiar interest in the light of what has preceded.[6] It is of red jasper, circular in shape, and has cut upon it the figures of two reclining bulls arranged back to back in a well-known Minoan fashion,[7] that is, while one is in a correct position for the spectator the other is upside down. Over the head of each bull is a double axe, and in the middle, between the two, is the Minoan character E, already known from examples found in Crete. Whatever its phonetic value, or its significance, or its proper position in Minoan writing, such a character in historic Greek times would certainly be regarded as a letter E.

What inferences can be legitimately drawn from the presence of this character on the gem? It must be remembered that above the

[1] *J.H.S.* XLI, 1921, p. 264.
[2] *Arch. Zeit.* 1866 (*Arch. Anz.* cols. 257 f. pl. A, No. 1).
[3] 'Eφ. 'Aρχ. 1889, pl. 10, No. 5.
[4] *J.H.S.* XLV, 1925, pp. 23 ff.; pl. II, No. 5.
[5] Plut. *De defectu orac.* ch. 1. In Euripides, *Ion* 224, Gorgons are mentioned as about it (ἀμφὶ δὲ Γοργόνες), but it seems doubtful whether the reference can be to the same objects.
[6] I am indebted to the Metropolitan Museum for the photograph of it published in Fig. 5.
[7] See, for example, a sard from the Vaphio tomb on which two lions are so depicted, 'Eφ. 'Aρχ. 1889, pl. 10, No. 4.

head of each bull is the double axe, an object of especial veneration in Minoan Crete and associated with the worship of Zeus. Here it indicates that these bulls are no ordinary animals, but are divine bulls, that is, they represent the Cretan Zeus himself in the guise of a bull. The association of the Minoan character with the bull god would thus seem to have some religious significance, perhaps being an indication of divinity.

It has long been recognized that the double axe was not merely a symbol of the Cretan Zeus, but also of the great goddess associated with him.[1] If, then, the Minoan ⋿ can be used of the god of the double axe, it is reasonable to suppose that it might be used also of the goddess of the double axe, whom we have already had reason to identify with the Gaia or Ge of Delphi. Furthermore the ancient omphalos found by M. Courby in the inner sanctuary of Apollo was dedicated to Ge as the inscription on it proves; and not merely the omphalos, but the E upon it must likewise be regarded as dedicated to her. Otherwise it would not have been cut on the stone. Thus it appears that the mysterious E of Delphi really belonged to the Earth goddess.

The E, then, seems to have originated in a Minoan character which may, perhaps, have signified divinity.[2] Together with the omphalos itself it probably came to Delphi from Crete as an attribute of the great goddess. When Apollo became lord of the Delphian oracle he took over the sacred symbol of the goddess, just as he did the omphalos, as part of the property of the shrine. Later ages likened the symbol to a letter E which it resembled. Thus the Minoan character under the guise of an E became an attribute of Apollo, and as such it was venerated at Delphi throughout antiquity. The historic Greeks had lost all knowledge of its origin or significance. To them it was Apollo's holy letter. The E of the temple at Delphi is thus an inheritance from prehistoric times, and another example of the conservatism in religious matters common in all ages.

William Nickerson Bates

University of Pennsylvania

[1] See above, p. 243, n. 6.

[2] No examples of Minoan writing have yet been found at Delphi, unless the two characters inscribed on a bronze axe hammer published by Sir Arthur Evans in *Scripta Minoa*, I, p. 59, fig. 35, are such. They do not exactly agree with any characters so far found in Crete.

Archaeological
Institute
of America

TRIBUTE ASSESSMENTS IN THE ATHENIAN EMPIRE FROM 454 TO 440 B.C.

THE whole theory of tribute assessment periods in the Athenian empire has been brought to question recently by Wing,[1] in spite of the statement in the pseudo-Xenophontean *Constitution of Athens* that reassessments were, in general, made every four years.[2] Wing argues that there were no regular assessment periods, or times of reassessment, but that the Athenians only on special occasions passed general decrees of reassessment, and that they altered at irregular intervals the amounts of tribute to be paid by individual cities. The four year interval mentioned in the *Constitution of Athens*, Wing observes, implies too great a rigidity of system, and he notices further that the tribute of individual cities, on the evidence of the quota lists, does actually show changes which cannot be made to correspond with the four year intervals of assessment.

The purpose of this paper is to reëxamine the evidence for assessment periods during the fifteen years (454/3–440/39) represented by the quota lists on the first large stele in the Epigraphical Museum at Athens (*I.G.* I², 191–205).

This reëxamination reveals the fact that Wing has overlooked several important considerations which bear directly on the theory of assessment periods, and it reveals also new evidence which determines beyond doubt the beginning of an assessment period in 443/2 (*I.G.* I², 202).[3]

In the first place it must be kept always in mind that the preserved quota lists record only the one-sixtieth part of the amount of tribute collected in the year which they represent. The quota lists, therefore, do not give a correct mathematical key to the amount of tribute a city was supposed to pay, unless that city actually paid its entire assessment. Usually the cities whose names appear on the quota lists did actually pay the whole amount of their

[1] Wing, *Tribute Assessments in the Athenian Empire*, Annual Report of the American Historical Association, 1916, Vol. I, pp. 289–297.

[2] Pseudo-Xen., *Constitution of Athens*, III, 5.

[3] This change has not been fully recognized by Koehler, Kirchoff, Busolt, Pedroli, Beloch, and Cavaignac. The references are:

Koehler, Urkunden und Untersuchungen zur Geschichte des delisch-attischen Bundes, *Abh. der Ber. Akad.*, 1869, p. 131.

Kirchhoff, Table in Corpus, Vol. I, pp. 226 ff.

Busolt, Der Phoros der athenischen Buendner von 446/5 bis 426/5, *Philologus*, XLI, 1882, pp. 653–655.

Pedroli, I Tributi degli Alleati d'Atene, in Beloch's *Studi di Storia Antica*, I, 1891, p. 199.

Beloch, *Griechische Geschichte*, II², 2, p. 333.

Cavaignac, *L'Histoire Financière d'Athènes au Vme Siècle*, p. XXXVIII and p. 91.

assessment, and that amount may be reckoned immediately by multiplying by sixty the amount of the tithe as preserved in the quota list. But a slight variation in the amount of the quota need not imply a change in the assessment.[1] It may imply merely that in that particular year the Athenians collected less than was their due, or perhaps more, the regular assessment plus a certain amount in arrears. For example, the tithe attributed to Gargares in *I.G.* I^{2}, 203 is 77 ⅔ Dr., but the assessment of the city for this year was probably exactly the same as was the assessment for *I.G.* I^{2}, 193 or *I.G.* I^{2}, 214, where the tithe is 75 Dr.

The irregularities in the record of Tenedos are now easily explained. *I.G.* I^{2}, 198 will be discussed later and need not enter into the consideration here. The name, in one way or another, appears there four times. But the figures preserved in the tithe for *I.G.* I^{2}, 196 (– – ⊢⊢⊢II) are not sufficiently significant to indicate an assessment different from that indicated by the tithe in *I.G.* I^{2}, 195 (H𐅄Δ⊢⊢), even supposing that this latter figure represents the true assessment of the second period. The probabilities are, however, that the tithe of *I.G.* I^{2}, 195 represents a back payment, or a partial payment, just as the tithe of Χαλχηδόνιοι (HHH) in the same inscription represents a partial payment, perhaps in arrears, on the assessment of nine talents laid upon Chalcedon in the second period.[2] One may notice also that in this same inscription, *I.G.* I^{2}, 195, the name Πασανδῆς appears twice with its regular tithe of 50 Dr. But whether or not the tithe of Tenedos in *I.G.* I^{2}, 195 (H𐅄Δ⊢⊢) indicates the true assessment of that city, the preserved figures of the tithe in *I.G.* I^{2}, 196 (– – ⊢⊢⊢II) are not sufficient to indicate a change of assessment within the period. A similar explanation may be offered for the different tithes in *I.G.* I^{2}, 192 and 193, or for the different tithes in *I.G.* I^{2}, 202, 203, and 205. And the record of Tenedos conforms very reasonably to the tribute assessment periods.

For the sake of completeness I list here the other examples of slight divergence of tithe within the assessment periods in the first fifteen years. There is no significant difference between the amounts of quota recorded for Singus in *I.G.* I^{2}, 191 and 193. The name Ἀβυδηνοί shows a variation between *I.G.* I^{2}, 202 and *I.G.* I^{2}, 203, 204, and 205. The figures preserved in *I.G.* I^{2}, 202 are, however, not sufficient to determine how great the variation is. The tithe of Βυζάντιοι in *I.G.* I^{2}, 204 is X𐅅𐅃⊢⊢IIII, a variation from the normal tithe of X𐅅𐅄ΔΔ⊢IIII (*I.G.* I^{2}, 202 and 203), but the variation is not large enough to reflect a difference in the assessment. The tithe H𐅄ΔΔΔIIII for Ἁλικαρνάσσιοι in *I.G.* I^{2}, 204 is not significantly different from the tithe H𐅄Δ𐅃⊢IIII

[1] This was noted by Koehler, *op. cit.*, p. 129.

[2] See below p. 249.

recorded in *I.G.* I², 203 and 205. There was some divergence in tithe in the record of Ἡφαιστιῆς between *I.G.* I², 200 and *I.G.* I², 201, but the preserved figures of *I.G.* I², 200 are hardly enough to determine the extent of the difference.

In the record of Καρυανδῆς the tithe given in *I.G.* I, 230 is Γ⊢⊢⊢⊢ΙΙ as distinct from the usual Γ⊢⊢⊢ΙΙ of this period. The difference is only slight in any case, but I suspect that there is an error in the Corpus transcript. The miniscule restoration, certainly, gives the amount as Γ⊢⊢⊢ΙΙ, and this latter reading is followed in the new Corpus, *I.G.* I², 195.

The name Ληψιμάνιοι appears in *I.G.* I², 192, 193, and 194 with tithes of 17⅙, 20, and 25 Dr. respectively. The normal tithe was probably 20 or 25 Dr., but the variation is so large that I have included this name in the list of exceptions given below.

These small variations in tithe, then, do not indicate that there were changes in the assessment, and they should not be used as arguments against the theory of tribute assessment periods. Furthermore, there is one inscription (*I.G.* I², 198) which is almost entirely an anomaly. Reference has already been made to the four appearances of Tenedos in this inscription. Cos appears three times, and several towns appear twice, or are credited with more than one payment. No single recorded tithe can be taken as a sure index of the amount of tribute a city was supposed to pay. Irregularities found in this inscription, consequently, cannot be used as evidence against the theory of tribute assessment periods. The importance of this observation is the more remarkable when one realizes that the records of a considerable number of cities apparently do not conform to the tribute assessment periods merely because of unusual quotas found in *I.G.* I², 198. Such cities are: Αἴνιοι, Βαργυλιῆς, Βουθειῆς, Βυζάντιοι,[1] Δαρδανῆς, Ἐρυθραῖοι, Κυζικηνοί, Θάσιοι, Καμιρῆς,[2] Κῷοι, and Πάριοι.

With the above discussion in mind, we may readily see that exceptions to the rule of tribute assessment periods were not nearly so numerous as Wing has supposed them to be. And, curiously enough, the irregularities in the record of Chalcedon, which Wing chose for the illustration of his argument,[3] are based on faulty restorations in the Corpus. Wing says, "Chalcedon, for example, paid 7½ talents in 452; 9 talents in 451; and 12 talents in 450. Changes occurred, therefore, both in 451 and 450." The tribute of Chalcedon in 452 was, indeed, 7½ talents, but its record for 451 is not preserved. The nine talents of 451 belong to Kamires. The letters preserved on the stone are ΚΑ. This restoration is borne out by the inscription of the following year, 450 (*I.G.* I², 195). Here

[1] But *cf.* *I.G.* I², 204 and p. 248, *supra.*
[2] *Cf.* restorations for Καμιρῆς in this paper, pp. 249, 250, and 254.
[3] Wing, *op. cit.*, p. 293.

the name Chalcedonioi is restored without doubt with a tithe of 300 Dr. (3 talents tribute).[1] The other nine talents belong again to Kamires, and the letters preserved on the stone are again KA. The tribute of Chalcedon, therefore, was 7½ talents in the first period, 9 talents in the second period,[2] and 9 talents in the third period (*I.G.* I², 200). The restoration of the name Kamires in *I.G.* I², 194 and 195 shows that its tribute for the first two periods was 9 talents. The appearance of the name in *I.G.* I², 198 with a tithe of 400 Dr. proves nothing. It has already been noted that the figures in *I.G.* I², 198 are not a reliable index of the assessment of that year.[3] As a further indication that the nine talents of *I.G.* I, 230 do not belong to Chalcedon, we may notice that the name would have a different spelling from that of the entry where it may be restored with certainty. The name as restored with a tithe of 300 Dr. is spelled XAVXEΔON[IOI]. The proposed restoration with the tithe of 900 Dr. would have to be KA[VXEΔONIOI]. We should at least expect the scribe to spell the same name the same way on the same inscription, and as a matter of fact there is no authority from the tribute lists for the spelling of the name as KAVXEΔONIOI before *I.G.* I², 203. The Corpus has added one more element of confusion by restoring the name as XAVKEΔONIOI in *I.G.* I², 193. There is no authority anywhere in the tribute lists for the spelling of the name with a K in the fourth letter space.

The *lapis primus* of the Corpus, containing inscriptions 191 to 205 inclusive, makes possible a certainty of dating assessments in the first fifteen years, and the assessment periods as indicated by this stone may be outlined as follows:

I	454/3 –451/0	*I.G.* I², 191, 192, 193, and 194
II	450/49–447/6	*I.G.* I², 195, 196, 197, and 198
III	446/5 –444/3	*I.G.* I², 199, 200, and 201
IV	443/2 –440/39	*I.G.* I², 202, 203, 204, and 205

The end of the fourth period cannot be determined from the first stone alone, and for the purposes of this paper the fourth period will be considered as extending merely from 443/2 to 440/39.

When the irregularities of *I.G.* I², 198 and the irregularities which show only a small variation in the amount of tithe within a period are left out of consideration, there are still several cities whose records of quotas paid do not conform to the assessment periods as outlined above. These cities are:

(1) HABΔEPITAI: The amount of the tithe in *I.G.* I², 196 is XHHHH. The tithe recorded for Abdera in *I.G.* I², 195 for the same assessment period is X𐅅. For some reason Abdera did not pay her full quota

[1] See addendum 1 at end of article p. 273. [2] *Ibid.*

[3] Busolt, *op. cit.*, p. 704 suggests that the 400 dr. of *I.G.* I, 233 (*I.G.* I², 198) do not represent the full quota of Καμιρῆς.

in 449/8 (*I.G.* I², 196). One may assume from the appearance of the tithe Χ𐅅 in the first assessment period (*I.G.* I², 193) and in the third assessment period (*I.G.* I², 200) that the true index of the tribute expected from Abdera in the second period also is the tithe Χ𐅅 recorded in *I.G.* I², 195.

Abdera also presents an irregularity in the first period. The tithe recorded in *I.G.* I², 191 is ΧΗΗ𐅄ΔΔΔΓ, and the tithe recorded in *I.G.* I², 193 is Χ𐅅.

(2) ΛΑΜΦΣΑΚΕΝΟΙ: There is a tithe of ΧΗΗ in *I.G.* I², 195, but a tithe of only 𐅄ΔΔΔΓ⊢ in *I.G.* I², 196. This failure to pay in 449/8 was probably due to the famine of that year (Thuc. I, 112 and Koehler, *op. cit.*, p. 130).

(3) ΛΕΦΣΙΜΑΝΙΟΙ: The variation in the tithe in the first period has already been mentioned (p. 249 above).

(4) ΜΕΝΔΑΙΟΙ: The tithe is 𐅅ΗΗΗ in *I.G.* I², 202 (see addendum 2 at end of article p. 273), and 𐅅 in *I.G.* I², 205.

(5) ΓΕΛΕΙΑΤΑΙ: The regular tithe in the second period seems to have been 𐅄 (*I.G.* I², 195 and 198), but the amount 𐅄ΔΓ⊢ΙΙΙΙ is recorded in *I.G.* I², 197.

(6) ΣΑΜΟΘΡΑΙΚΕΣ: The tithe shows a drop to ΗΗΗΗ in *I.G.* I², 205 after the recorded amount 𐅅Η in *I.G.* I², 202.

(7) ΣΕΡΜΥΛΙΕΣ: There is a very high payment in *I.G.* I², 191 (Χ𐅅ΗΗ𐅄ΔΔ⊢⊢), followed by a lower payment in *I.G.* I², 194 (𐅅𐅄ΔΔΔ⊢ΙΙΙΙ).

(8) ΣΤΟΛΙΟΙ: The record of Stolus shows a tithe of 𐅄ΔΓ⊢ΙΙΙΙ in *I.G.* I², 195 and a larger tithe of 𐅄ΔΔΔ⊢⊢⊢ΙΙ in *I.G.* I², 196.

(9) ΧΕΡΡΟΝΕΣΙΤΑΙ: The record presents a tithe of ΧΗΗΗ𐅄ΔΔΔΙΙΙΙ in *I.G.* I², 195 and a tithe of Χ𐅅ΗΗ [Η] in *I.G.* I², 197.

Over against these nine exceptional cases where the amount of tribute paid did not equal the amount of tribute assessed there are the records of *sixty-eight* cities whose records of payment not only indicate the tribute assessment periods as given above, but actually demand the postulation of such periods. The names of these cities or peoples are: Ἀβυδηνοί, Ἀθηνῖται, Αἰγάντιοι, Αἴνιοι, Ἄνδριοι, Ἀργίλιοι, Ἀστακηνοί, Ἀστυπαλαιῆς, Ἀφυταῖοι, Βουθειῆς, Βυζάντιοι, Γαλήψιοι, Δαρδανῆς, Διῆς, Δίκαια, Διοσιρῖται, Ἐρινῆς, Ἐρυθραῖοι, Ἐφέσιοι, Αἰραῖοι, Ἡφαιστιῆς, Θάσιοι, Θραμβαῖοι, Θύσσιοι, Ἰᾶται, Ἰδυμῆς, Ἰηλύσιοι, Ἴμβριοι, Καμιρῆς, Καρυανδῆς, Καρύστιοι, Κεβρήνιοι, Κνίδιοι, Κολοφώνιοι, Κυμαῖοι, Κῷοι, Λεβέδιοι, Λιμναῖοι, Λίνδιοι, Μαδνασῆς, Μηκυβερναῖοι, Μιλήσιοι, Μυήσσιοι, Μυκόνιοι, Μυλασῆς, Νεάπολις ἀπ' Ἀθηνῶν, Νισύριοι, Οἰναῖοι, Ὀλοφύξιοι, Παριανοί, Πηδασῆς, Πολιχναῖοι, Ῥηναιῆς, Σερίφιοι, Σκαβλαῖοι, Σκιωναῖοι, Σιδούσιοι, Σίγγιοι, Σύριοι, Τενέδιοι, Τερμερῆς, Τυρόδιζα, Φασηλῖται, Φηγήτιοι, Φωκαιῆς, Χαλκεᾶται, Χαλχηδόνιοι, and Χερρονήσιοι.

One needs only to marshall the evidence to see what the conclusion must be. There were reassessments of tribute in 450/49, in 446/5,

and in 443/2. This conclusion is based on the change of tithe alone, and the evidence is unmistakably clear. Certainly this is true for the first two reassessments. There is less evidence for the reassessment in 443/2, but other reasons will be brought forward later to confirm the fact of a reassessment in that year.

For the sake of convenience in reference I give here in outline tabular form a list of those cities whose tithes show variation during the first fifteen years. The Roman numeral above the column denotes the assessment period indicated in that column, and the amount of the tithe is given together with the evidence for the amount. The numbers under the tithe refer to those inscriptions in Volume I of the Corpus, *editio minor*, where the name occurs.

It was noticed above and it will be made clear from the table, that there were fewer changes in the amount of tithe in the year 443/2 than there were in 450/49 and 446/5. In fact, the presumption of a reassessment in 443/2, so far as the evidence of tribute payments is concerned, rests on the records of Ἀθηνῖται, Τενέδιοι, Γαλήψιοι, Φωκαιῆς and Νεοπολῖται alone. And even the value of Νεοπολῖται as evidence for the change depends on a somewhat uncertain assignment of the item ΔΓ⊢ΙΙΙΙ Νεάπο [λις] of *I.G.* I², 200 to the Hellespontine city.[1] The change in the tithe of Ἀβυδηνοί is not large enough to be significant. For this reason Koehler, and those who have followed him, did not distinguish between the third and fourth assessment periods.[2]

But it is precisely here, where evidence from the amounts of tithe is weakest, that other considerations help in determining the fact of the new assessment period.

If one studies through the whole body of the tribute lists and notices the way in which the various names appear on the stone, he will be surprised, perhaps, at the number of different ways of spelling or listing a given name. For example, Potidaea appears as Ποτείδαια or Ποτειδεᾶται; Athenitai appears as Ἀθηναῖοι, Ἀθῆναι Διάδες, or Ἀθηνῖται; and Lephsimanioi appears as Ληψιμάνιοι, Ληψίμανδοι, Ληψιμανδῆς, or Ληψυανδῆς. The remarkable fact is not so much that the spelling of the name changes, as that these changes in spelling occur, generally, in certain definite years, *and these years are precisely those which mark the beginning of new assessment periods.*[3]

[1] *Cf.* p. 269 below. Dahms, *De Atheniensium sociorum tributis quaestiones septem*, diss. Ber., 1904, p. 35, has incorrectly used the records of Βουθειῆς and Σιδούσιοι as evidence for the reassessment. The fragment from *I.G.* I, 235 on which the names occur belongs with *I.G.* I, 233. *Cf. I.G.* I, Suppl., p. 71. It is given correctly as part of *I.G.* I², 198 in the new Corpus.

[2] Koehler, *op. cit.*, p. 127 and p. 148.

[3] In this paper the study includes the first fifteen years only, but it may be extended to all the preserved tribute lists, and the criterion of the spelling of the name offers a new guide for the dating of unassigned fragments.

	I	II	III	IV
Ἀβυδηνοί See p. 248	? 194	. . . ΔIIII 196, 198	ΗΗΗΗΓIC 200, 201	ΗΗΗΗ 202, 203, 204, 205
Ἀθηνῖται	No Evidence	ΔΔΔ├├II 196, 197	𐅄ΔΓ├IIII 200, 201	ΔΔΔ├├II 202, 203, 204
Αἰγάντιοι	𐅄 194	𐅄 196, 198	ΔΔΔ├├├II 199, 200, 201	ΔΔΔ├├├II 202, 203, 204, 205
Αἴνιοι	ΧΗΗ 192, 193	ΧΗΗ 195, 198	Χ 200, 201	Χ 202, 204, 205
Ἄνδριοι	ΧΗΗ 194	𐅅Η 195, 196, 198	No Evidence	𐅅Η 202, 203, 204, 205
Ἀργίλιοι	Χ𐅄 191	No Evidence	Η 199, 200, 201	Η 202, 203, 204, 205
Ἀστακηνοί	Η𐅄 191, 192	ΔΓ├IIII 195	ΔΓ├IIII 200	ΔΓ├IIII 204
Ἀστυπαλαιῆς	? 192	ΗΗ 198	No Evidence	Η𐅄 202, 203, 204, 205
Ἀφυταῖοι	ΗΗΗ 193, 194	ΗΗΗ 196, 198	Η 199, 200	Η 202, 203, 204, 205
Βουθειῆς	ΔΓ├IIII 191, 192, 194	├IIII 195, 196, 197, 198	? 201	ΔΓ├IIII 202, 203, 205
Βυζάντιοι See p. 248	? 193	Χ𐅅 195, 196, 198	No Evidence	Χ𐅅𐅄ΔΔ├IIII 202, 203, 204
Γαλήψιοι	Η𐅄 191, 193	ΗΔΔ? 195, 196, 197, 198	Η𐅄 199	𐅄 202, 203, 205
Δαρδανῆς	Η𐅄 194	ΔΔΔΔΓ├ 196, 198	? 200, 201	Η 202, 203, 204, 205
Διῆς Island	ΔΓ├IIII 194	ΔΔΔ├├├II 196, 198	No Evidence	ΔΔΔ├├├II 202, 203, 204
Δίκαια παρ' Ἄβδηρα	𐅄 191, 193, 194	𐅄 195, 196, 198	ΔΔΔ├├├II 199, 200	? 205
Διοσιρῖται	ΔΓ├IIII 191, 192	ΔΓ├IIII 195, 196, 198	No Evidence	Γ├├├II 203, 205

	I	II	III	IV
Ἐρινῆς	𐅄ΔΓ├├├IIIII 192	No Evidence	ΔΓ├IIII 199, 201	No Evidence
Ἐρυθραῖοι	No Evidence	𐅅HHH𐅄Γ 195, 196, 198	𐅅HH 201	𐅅HH 202, 205
Ἐφέσιοι	𐅅HH𐅄 192, 193	𐅅HH𐅄 198	𐅅H 199, 200, 201	𐅅H 202, 203, 204, 205
Ἀβδηρῖται See p. 250	X𐅅 191, 193	X𐅅 195, 196	X𐅅 200	No Evidence
Αἰραιῆς	HHH 191	HHH 195, 196, 197, 198	H 199	H 203, 205
Ἡφαιστιῆς See p. 249	? 192	ΔΔΔΓ├├ or 𐅄ΔΔΓ├├II 198	HHH 200, 201	HHH 202, 203, 204
Θάσιοι	HHH 191, 193, 194	HHΔΔΔΔΓ├ 196, 198	XXX 201	[XXX] 205
Θραμβαῖοι	with Scione 𐅅H 192, 194	No Evidence	alone ΔΓ├IIII 199, 200, 201	ΔΓ├IIII 202, 204, 205
Θύσσιοι	𐅄Δ𐅄├IIII 193, 194	H𐅄 195	H 199, 200, 201	H 202, 203
Ἰᾶται	H 191, 192, 193	Δ├├├├ 195, 196, 198	? 200	𐅄 202, 204, 205
Ἰδυμῆς	See Πακτύη, p. 270 192, 194	𐅄ΔΓ├IIII 196, 197, 198	ΔΔΔ├├├II 200	? 204
Ἰηλύσιοι	? 193, 194	X 195, 198	No Evidence	𐅅H 202, 203, 204
Ἴμβριοι	No Evidence	𐅄Γ? 198	? 199	H 202, 203, 204
Καμιρῆς See pp. 249–50	𐅅HHHH 193, 194	𐅅HHHH 195, 196, 198	No Evidence	𐅅H 202, 204, 205
Καρυανδῆς See p. 249	ΔΓ├IIII 193	Γ├├├II 195, 198	Γ├├├II 199, 201	Γ├├├II 202, 203, 205
Καρύστιοι	𐅅HH𐅄 194	𐅅 195, 196, 198	No Evidence	𐅅 202, 203, 204

	I	II	III	IV
Κεβρήνιοι	HHH 191	HΔΔΔΔΓ 195	No Evidence	No Evidence
Κνίδιοι	[HH]H 193, 194	𐅅 195, 196	No Evidence	HHH 202, 203, 204
Κῷοι	? 194	HHH𐅄Γ⊢ 195, 196, 198	No Evidence	𐅅 202, 204, 205
Κολοφώνιοι	HHH 191, 192, 193, 194	No Evidence	H𐅄 199	H𐅄 203, 205
Κυμαῖοι	XHH 193, 194	𐅅HHHH 196, 197, 198	𐅅HHHH 199, 201	𐅄HHHH 203, 205
Λαμψακηνοί See p. 251	XHH 194	XHH 195, 196, 198	No Evidence	XHH 202, 203, 204
Λεβέδιοι	HHH 194	? 195	H 199	H 203, 205
Ληψιμάνιοι See pp. 249, 251	ΔΔ? 192, 193, 194	? 196, 197, 198	ΔΓ⊢IIII 200, 201	ΔΓ⊢IIII 202, 203, 204, 205
Λιμναῖοι	No Evidence	ΔΔΔ⊢⊢⊢II(?) 198	? 199	Γ⊢⊢⊢II 203, 204
Λίνδιοι	𐅅HHHΔΔΔΔ.. 191, 193	X 196	𐅅H 200	𐅅H 202, 203, 204
Μαδνασῆς	HH 193	H 195, 198	? 200	H 202, 203, 204
Μηκυπερναῖοι	𐅅 – – 191, 193	H 195, 196, 197, 198	𐅄ΔΓ⊢IIII 199, 200, 201	𐅄ΔΓ⊢IIII 202, 203, 204
Μενδαῖοι See p. 251	𐅅HHH 193, 194	X𐅅 196, 198	𐅅 199, 201	𐅅 202, 203, 204, 205
Μιλήσιοι	? 193	X 195, 198	? 199	𐅅 202, 203, 205
Μυήσσιοι	H(𐅄) 193	H 195, 198	? 199	H 202, 203, 204, 205
Μυκόνιοι	H𐅄 194	? 196, 198	No Evidence	H 202, 203, 204

	I	II	III	IV
Μυλασῆς	No Evidence	Η 195, 198	𐅄ΔΔΔΓ⊢IIII 199, 200	𐅄ΔΔΔΓ⊢IIII 203, 204, 205
Νεοπολῖται Hellespont	No Evidence	ΔΓ⊢IIII 195, 198	ΔΓ⊢IIII 200 See p. 269	Γ 203, 205
Νισύριοι	Η𐅄 193	No Evidence	? 199	Η 203, 205
Οἰναῖοι	ΗΔΔΔ⊢⊢⊢II 191, 194	? 195, 196, 198	𐅄ΔΓ⊢IIII 199	𐅄ΔΓ⊢IIII 203, 205
Ὀλοφύξιοι	ΔΔΔ⊢⊢⊢II 194	ΔΔΓ 196	ΔΔΔ⊢⊢⊢II 199, 201	ΔΔΔ⊢⊢⊢II 202, 203
Παριανοί	Η 191	Η 197	? 199	ΔΔΔ⊢⊢⊢II 203, 204, 205
Πηδασῆς	Η 194	ΗΗ 196, 197, 198	No Evidence	No Evidence
Πελειᾶται See p. 251	No Evidence	𐅄 195, 197, 198	? 199, 200	𐅄 202, 203, 204, 205
Πολιχναῖοι	ΔΓ⊢IIII 194	Η? 195, 196, 197, 198	𐅄ΔΓ⊢IIII 199, 201	𐅄ΔΓ⊢IIII 202, 203, 204, 205
Ῥηναιῆς	ΔΓ⊢IIII 194	Γ 196, 198	No Evidence	Γ 202, 204, 205
Σαμοθρᾷκες See p. 251	𐅅Η 192, 193, 194	𐅅Η 195, 196, 198	𐅅Η 200, 201	𐅅Η 202, 203, 204, 205
Σερίφιοι	ΗΗ 194	Η 196, 198	? 200, 201	Η 202, 204
Σερμυλιῆς See p. 251	𐅅𐅄ΔΔΔΔ⊢IIII 191, 194	ΗΗΗ 196, 197, 198	𐅅 200, 201	𐅅 202, 203, 205
Σίγγιοι See p. 248	ΗΗΗΗ 191, 193, 194	Η𐅄ΔΔΔ⊢⊢⊢II 195, 196, 197, 198	ΗΗ 199, 200	ΗΗ 202, 203, 205
Σιδούσιοι	No Evidence	𐅄? 195, 196, 198	? 199, 201	Γ⊢⊢⊢II 202, 203, 204, 205
Σκαβλαῖοι	? 191, 194	𐅄 195, 196, 198	ΔΔΔ⊢⊢⊢II 199	? 202, 203, 204

	I	II	III	IV
Σκιωναῖοι	with θραμβαῖοι 𐅅H 192, 194	𐅅HH𐅄ΔΔΔΔIIII 196, 198	𐅅H 199, 200, 201	𐅅H 202, 203, 204
Στώλιοι See p. 251	with Mecyperna 𐅅 . . . I; alone? 191, 194	𐅄ΔΔΔ├├├II 195, 196, 198	𐅄ΔΓ├IIII 200	𐅄ΔΓ├IIII 202, 203
Σύριοι	ΔΔΓ 193	No Evidence	? 199	ΔΓ├IIII 203, 204
Τενέδιοι See p. 248	HHHHΓ 192, 193	H𐅄Δ├├├II? 195, 196, 198	HHH𐅄 200, 201	HH𐅄ΔΔΔΓ├├├ 202, 203, 205
Τερμερῆς	HH𐅄 191, 192, 193, 194	? 196, 198	No Evidence	H? 202, 204, 205
Τυρόδιζα	ΔΓ├IIII 193	No Evidence	Γ├├├II 199, 200	No Evidence
Φασηλῖται	𐅅H 191, 193, 194	HHH 195, 196	No Evidence	HHH 202, 203, 204
Φηγήτιόι	? 194	ΔΔΓ├IIII 195, 196	ΔΓ├IIII 199, 200, 201	ΔΓ├IIII 202, 203, 204
Φωκαιῆς	HHH 193, 194	HHH 196, 198	H𐅄ΔΔΔΓ├├III 199	HH 203, 205
Χαλκεᾶται	? 194	𐅄 195	ΔΔΔ├├├II 200	ΔΔΔ├├├II 202, 203, 204
Χαλχηδόνιοι See pp. 249–50	𐅅HH𐅄I 193	𐅅HHHH 195, 196, 198	𐅅HHHH 200, 201	𐅅HHHH 202, 203, 204, 205
Χερρονήσιοι	[HH]H 193	HHH 195, 196, 198	No Evidence	HH𐅄ΔΔ 204
Χερρονησῖται	X𐅅HHH 191, 193, 194	X𐅅HHH? 195, 197, 198	? 201	H 203, 204, 205

So far as I know, this phenomenon has not been noticed before, and its significance in the study of tribute assessment periods is at once apparent. It has been the custom heretofore to determine the assessment periods by the changes in the amounts of tithe. It is now possible to supplement this method by using the additional evidence of the changes in the spelling of the names. During the first fifteen years, we may now be doubly sure that reassessments were made in 450/49, 446/5, and 443/2. The fact of the last reassessment, which was somewhat inadequately supported by change in tithe, is sufficiently well established by the changes in the spelling of the names which appear in that year.

Because Koehler and Kirchhoff, and those who have followed them, did not fully recognize the fact (now established) of a new assessment decree in 443/2, they failed also to understand the significance of one other item of evidence which they had at their disposal. In 443/2 the names on the quota lists appear for the first time in five geographical divisions.

That this division depends on the arrangement of the names as they stood in the assessment list, and was not merely the innovation of the secretary of the Hellenotamiai, is shown by a quotation from Craterus of Macedon (*F.H.G.*, Vol. II, p. 618, fragment 2). He is cited by Stephanus of Byzantium (*s.v.* Δῶρος) as giving part of an Attic decree with the heading Καρικὸς Φόρος followed by Carian names. Busolt rightly recognized that this could not be a quotation from the quota lists (for they were not decrees), but that it was a quotation from an assessment decree.[1] However, he, and Koehler and Kirchhoff before him, were unwilling, according to their theory of tribute assessment periods, to have a reassessment fall in 443/2, and they did not identify the fragment of Craterus as part of the assessment decree on which the quota lists of 443/2–440/39 were based.[2] As a matter of fact, this fourth assessment period was the only one in which the Carian tribute was listed as distinct from the Ionic, and the heading Καρικὸς Φόρος of the fragment from Craterus of Macedon makes it possible to assign it definitely to the reassessment decree of 443/2.[3] The fact of a reassessment in that year has been determined by changes in tithe and changes in the spelling of the names, and the appearance of the five geographical divisions establishes the date of the fragment from Craterus and confirms the dating of a reassessment in 443/2. It is strange that Koehler, who dated the change from five to four geographical divisions at the time of a reassessment which he supposed to fall in 437/6,[4] should not have proposed the logical corollary of a reassess-

[1] Busolt, *op. cit.*, p. 713.
[2] Kirchhoff thought it from some earlier assessment, and Busolt, following him, suggested that of 454/3 (Busolt, *op. cit.*, pp. 713–714).
[3] As by Dahms, *De Atheniensium sociorum tributis quaestiones septem*, pp. 35–37.
[4] Koehler, *op. cit.*, p. 134.

ment in 443/2, when the division into five geographical districts was first established.

The new criterion of the spelling of the names not only helps in determining the date of the assessment periods, but it establishes beyond a doubt the fact that the reassessments were *general* reassessments. That is, they included the names of *all* cities, not merely the names of those whose tribute was changed. The proof lies in the fact that several cities show changes in the spelling of the name at the beginning of new assessment periods, while the amount of the tithe remains the same. A case in point is the record of Priapos. So far as is known, the tithe of this city was always $8\frac{1}{3}$ Dr. But in *I.G.* I^2, 193, 196, and 198 (representing the first two periods) the name is spelled ΓΡΙΑΓΕΣ. In *I.G.* I^2, 199, 200, 203, 204, and 205 (representing the third and fourth periods) the name is spelled ΓΡΙΑΓΟΣ. And in *I.G.* I^2, 210 the spelling ΓΡΙΑΓΕΣ reappears.

It cannot be a mere coincidence that the majority of the changes in the spelling of the name occur in the first year of new assessment periods. The explanation is, of course, that the name as it appears on the quota list in any given period is spelled as it was on the assessment list which had been previously drawn to cover that period. Naturally, one must be prepared for exceptions. The scribe would be sure to copy correctly the amount of money received, but he would not necessarily be so careful in his transcript of the name to which the amount was credited. The amount of money and not the spelling of the name was after all the important thing.

To determine, if possible, the chance for error, it will be useful to follow through the process of receiving the money into the treasury of Athena.

Payments were made by the allies at the time of the Greater Dionysia.[1] The money was received in the presence of the senate and checked, we must suppose, by the receiving board with cross reference to a copy of the assessment list which they had before them.[2] One chance for error in spelling existed in the first copying of the assessment list. Another chance for error occurred when the name of the city making payment was recorded by cross reference to this list. When the tithe was consecrated to the goddess, another record had to be made with the amount of the tithe only opposite the name of the city which had made payment, and, finally, a stonecutter was commissioned to chisel a copy of this "quota list" in stone. It is clear that there was abundant chance for divergence of spelling to creep in between the assessment lists and the quota lists as they have been preserved to us. The remarkable thing is

[1] Aristophanes, *Acharnians*, 505–506; Scholia to *Acharnians*, 378, 504; Koehler, *op. cit.*, p. 104; Wing, *op. cit.*, p. 291.
[2] Ps. Xen., *Constitution of Athens*, III, 2; Koehler, *op. cit.*, p. 104, note 1.

that the scribes reproduced as faithfully as they did the spelling of the name as it originally appeared on the assessment list.

It is possible to determine at once two natural directions of error. In the first place the name of a *people* is apt to occur on the quota list in place of the name of a *town*. Names were recorded in both ways and yet the names of *people* are more numerous. It is not surprising, therefore, to find the name of a people where the name of the town is known to have appeared on the assessment list. One might mention the name Κυρβισσῆς of *I.G.* I², 194 where the spelling Κυρβισσός in *I.G.* I², 191 shows that the name of the town and not the name of the people appeared on the assessment list of 454/3; the name Λαμπωνῆς of *I.G.* I², 194 where the spelling Λαμπώνεια of *I.G.* I², 191 shows that the name of the town appeared on the assessment list; the name Σπαρτώλιοι in *I.G.* I², 200 after the more general name Βοττιαῖοι in *I.G.* I², 199; the name Περκώσιοι in *I.G.* I², 205 after the name Περκώτη in *I.G.* I², 202; the name Δικαιοπολῖται in *I.G.* I², 205 in place of Δίκαια Ἐρετριῶν in *I.G.* I², 202, 203; the name Αἰσώνιοι in *I.G.* I², 205 in place of Αἴσων in *I.G.* I², 204. In *I.G.* I², 201 appears the name Φάρβηλος, although the form Φαρβήλιοι appears in *I.G.* I², 200 of the same period. But I am inclined to believe that even here the name was written on the assessment list as Φάρβηλος.

There is only one case, so far as I know, where the scribe has substituted the name of the town for the name of the people ([Νεάπολ]ις [Μενδαί]ων in *I.G.* I², 204 for the usual Νεοπολῖται). The natural direction of error was the other way.[1]

In the second place, we shall be prepared for simplifications in spelling, such as the transcription of only part of long names. Examples are Δίκαια for Δίκαια παρ' Ἄβδηρα in *I.G.* I², 194, 198 (?), 205 (?); Θερμαῖοι for Θερμαῖοι ἐν Ἰκάρῳ in *I.G.* I², 196, 198; Οἰναῖοι for Οἰναῖοι ἐν Ἰκάρῳ in *I.G.* I², 196, 198; Ἐλαιέα in *I.G.* I², 205 for Ἐλαιέα παρὰ Μύριναν.

The following table and the notes which follow it record those names which show variations in spelling during the first fifteen years. I give the name as it appears in each of the first four assessment periods, the amount of the tithe recorded for each city, and also the evidence for both tithe and spelling.

The first period (454/3–451/0) includes *I.G.* I², 191, 192, 193, 194.

The second period (450/49–447/6) includes *I.G.* I², 195, 196, 197, 198.

The third period (446/5–444/3) includes *I.G.* I², 199, 200, 201.

The fourth period (443/2–440/39) includes *I.G.* I², 202, 203, 204, 205. For the duration of this period *cf.* p. 250, *supra*.

[1] But *cf.* the possible restoration [Βουθε]ία in *I.G.* I², 203.

Name	Period	Spelling	Tithe	Evidence
'Αζειῆς	I	'Αζειοί	Γ├IIII	193
	II	'Αζειοί	[Γ├IIII]	198
	III			none
	IV	'Αζζε[ιοί or ιῆς]	Γ├II[II]	203
'Αστυρηνοί	I	'Α[στυρηνοί]	Γ├├├II	192
	II			none
	III	'Αστυρ[ηνοὶ Μυσο]ί	Γ├├├II	199, 201
	IV	'Αστυρηνοὶ Μυσο[ί]	Γ├├[├II]	205
Βαργυλιῆς	I	Βαργυλιῆς	[ΔΓ├]IIII	194
	II	Βαργυλιῆς	ΔΓ├IIII	195, 196, 197, 198?
	III	Βαργυλι[ῆς]	Δ[Γ├]IIII	200
	IV	Βαργυλιῆται	ΔΓ├IIII	203, 204, 205
Βερύσιοι	I	Βερύσιοι ὑπὸ τῇ Ἴδῃ	ΔΓ├IIII	191, 193
	II	Βερύσιοι	Δ[Γ├]IIII	196
	III	Βερύσιοι	ΔΓ├IIII	199
	IV			none
Βουθειῆς	I	Βουθειῆς	ΔΓ├IIII	191, 192, 194
	II	Βουθειῆς	├[IIII]	195, 196, 197, 198?
	III	Βουθειῆς 'Ερυθραί	?	201
	IV	Βουθειῆς	ΔΓ├IIII	202, 203, 205
Γρυγχῆς	I	Γρυγχῆς	ΔΓ├IIII	194
	II	Βρυνχειῆς	[ΔΓ├I]III	197 (EM 5224) *Cf.* note on 'Αθηνῖται, p. 265 196, 198
	III	Γρυνχῆς	ΔΓ├IIII	201
	IV	Γρυνχῆς	ΔΓ├IIII	202, 203, 204
Διῆς Island	I	Διῆς	ΔΓ├IIII	194
	II	Διῆς	ΔΔΔ├├├II	197 (EM 5224) *Cf.* note on 'Αθηνῖται p. 265 196, 198
	III			none
	IV	Διῆς ἀπὸ Κηναίου	[Δ]ΔΔ├├├II	202, 203, 204
Διῆς Thrace	I	Διῆς	H	194
	II	Διῆς	H	196
	III	Διῆς οἱ ἐ Ἄθω	H	199
	IV	Διῆς ἀπὸ τοῦ Ἄθω	H	202, 203, 204, 205

NAME	PERIOD	SPELLING	TITHE	EVIDENCE
Δίκαια	I	Δικαιοπολῖται	HHHH	191
	II	Δικαιοπολῖται Ἐρετριῶν ἄποικοι	?	195, 197, 198
	III	Δίκαια Ἐρετρι	?	199, 201
	IV	Δίκαια Ἐρετρ	?	202, 203, 205
Ἐλαιῖται	I	Ἐλαιῖται	ΔΓ├IIII	193, 194
	II			none
	III	Ἐλαία παρὰ Μυρι-	ΔΓ├IIII	199, 201
	IV	Ἐλαιέα παρὰ Μυ-	ΔΓ├IIII	203, 205
Αἰραιῆς	I	Αἰραῖοι	HHH	191
	II	Αἰραῖοι	HHH	195, 196, 197, 198
	III	Αἰραῖοι	H	199
	IV	Αἰραιῆς	H	203, 205
Αἰσώνιοι	I	Αἴσων	ΔΔΓ	194
	II			none
	III	Αἰσωνῆς	ΔΔΓ	201
	IV	Αἴσων	ΔΔΓ	202, 204, 205
Ἁλικαρνάσσιοι	I	Ἁλικαρνασσῆς	H𐅄ΔΓ├IIII	191, 193, 194
	II	Ἁλικαρνάσσιοι	?	195, 196, 198
	III	Ἁλικαρνάσσιοι	[H𐅄ΔΓ]├IIII	200
	IV	Ἁλικαρνάσ[σιοι] or Ἁλικαρνασ[σῆς]	H𐅄ΔΓ[├IIII]	203, 204, 205
Ἁρπαγιανοί	I			none
	II	Ἁρπάγιοι	Γ	196
	III	Ἁρπάγιοι	Γ	200
	IV	Ἁρπαγιανοί	Γ	202, 203, 204, 205
Θερμαῖοι	I	Θερμαῖοι ἐν Ἰκάρῳ	𐅄	193, 194
	II	Θερμαῖοι ἐν Ἰκάρῳ	𐅄	195, 196, 198
	III			none
	IV	Θερμαῖοι ἐξ Ἰκάρου	𐅄	203, 205
Καρβασυανδῆς	I	Καρβασυανδῆς	ΔΓ├IIII	191, 192, 193, 194
	II	Καρβασυανδῆς	ΔΓ├IIII	195, 196
	III	Καρβ[ασυανδῆς παρὰ Καῦνον]	[ΔΓ├IIII]	201
	IV	Καρβασυανδῆς παρὰ Καῦνον	ΔΓ├IIII	202, 203, 204, 205
Κεραμῆς	I	Κεράμιοι	H𐅄	191, 193, 194
	II	Κεραμῆς	H[𐅄]	196, 198
	III	Κεράμιοι	[H𐅄]	200
	IV	Κεράμιοι	H𐅄	202, 203, 204

NAME	PERIOD	SPELLING	TITHE	EVIDENCE
Κυρβισσῆς	I	Κυρβισσός	ΔΔΔ├├├II	191, 193, 194
	II	Κυρβισσῆς	[Δ]ΔΔ├├├II	195, 196, 198
	III	Κυρβισσός	Δ[ΔΔ├]├├II	199, 200
	IV			none
Λαμπωνειῆς	I	Λαμπώνεια	ΔΓ├IIII	191, 194
	II	Λαμπώνεια	[ΔΓ]├II[II]	196
	III	Λαμπώνεια	ΔΓ├IIII	199, 200, 201
	IV	Λαμπωνειῆς	ΔΓ├IIII	202, 203, 204, 295
Ληψιμανδῆς	I	Ληψιμάνιοι	ΔΔ?	192, 193, 194
	II	Ληψίμανδοι	?	196, 197, 198
	III	Ληψιμανδῆς	ΔΓ├IIII	200, 201
	IV	Ληψυανδῆς	ΔΓ├IIII	202, 203, 204, 205
Μαρωνῖται	I	Μαρωνῖται	H𐅄	191, 192, 193, 194
	II	Μαρωνῖται	H𐅄	195, 196, 198
	III	Μαρωνῖται	H𐅄	199, 200, 201
	IV	Μαρωνειῆς	H𐅄	202, 203, 204
Μύνδιοι	I	Μύνδιοι	Γ├├├II	192, 193, 194
	II	Μύνδιοι παρὰ Τέρμερα	Γ├├├II	195, 196
	III	Μύνδιοι	Γ├├├II	200, 201
	IV	[Μύν]δ[ιοι]		202?
Μυριναῖοι	I	Μυριναῖοι	H	193, 194
	II	Μυριναῖοι	H	195, 198
	III	Μύρινα παρὰ Κύμην	H	199
	IV	Μυριναῖοι παρὰ Κύμην	H	203, 205
Ναξιᾶται	I	Ναξιᾶται		193, 194
	II	Ναξιᾶται	Γ├├├II	196
	III	Ναξία παρὰ Μ . .	Γ├├├II	200
	IV	Ναξιᾶται	Γ├├├II	202, 203, 204
Νεοπολῖται	I			none
Hellespont	II	Νεάπολις ἀπ' Ἀθηνῶν	ΔΓ├[IIII]	195, 198
See p. 269	III	Νεάπολις ἀπ' Ἀθηνῶν	ΔΓ├IIII	200
below	IV	Νεάπολις ἀπ' Ἀθηνῶν	Γ	203, 205
Νεοπολῖται	I	Νεάπολις ἐν Θρᾴκῃ	ΔΓ[├IIII]	191
by Antisara	II	Νεάπολις παρ' Ἀντισάραν	ΔΓ├IIII	195, 196
	III	Νεάπολις	[ΔΓ├IIII]	199, 200
	IV	Νεοπολῖται	ΔΓ├IIII	202
Νεοπολῖται	I	Νεοπολῖται	𐅄	191, 194
Mendaean	II	Νεοπολῖται Μενδαίων ἄποικοι	𐅄	195, 196, 197
	III	Νεοπολῖται	𐅄	199, 201
	IV	Νεοπολῖται	𐅄	202, 204, 205

Name	Period	Spelling	Tithe	Evidence
Περκώσιοι	I	Περκώσιοι	ΔΓ⊢IIII	193, 194
	II	Περκώτη	[ΔΓ⊢IIII]	196
	III	Περκώτη	ΔΓ⊢IIII	199, 200, 201
	IV	Περκώτη		202, 205
Πολιχνῖται	I	Πολιχναῖοι κα[ὶ . .	ΔΓ⊢IIII	194
	II	Πολιχναῖοι	H?	195, 196, 197, 198
	III	Πολιχναῖοι or Πολιχνῖται	𐅄ΔΓ⊢IIII	199, 201
	IV	Πολιχνῖται	𐅄ΔΓ⊢IIII	202, 203, 204, 205
Ποτειδεᾶται	I			none
	II			none
	III	Ποτείδαια	𐅄H	200, 201
	IV	Ποτειδεᾶται	𐅄H	202, 203, 204, 205
Πριαπῆς	I	Πριαπῆς		193
	II	Πριαπῆς	Γ⊢⊢⊢II	196, 198
	III	Πρίαπος	Γ⊢⊢⊢II	199, 200
	IV	Πρίαπος	Γ⊢⊢⊢II	203, 204, 205
Σερμαῖοι	I			none
	II	Σερμαῖοι or Σερμῆς	Γ⊢⊢⊢II	195, 196, 198
	III	Σερμῆς	Γ⊢⊢⊢II	200, 201
	IV	Σερμαῖοι	Γ⊢⊢⊢II	205
Σερμυλιῆς	I	Σερμυλιῆς	𐅅𐅄ΔΔΔ⊢IIII?	191, 194
	II	Σερβυλιῆς	HHH	196, 197, 198
	III	Σερμυλιῆς καὶ συν	𐅅	200, 201
	IV	Σερμυλιῆς	𐅅	200, 203, 205
Χερρονησῖται	I	Χερσονησῖται	X𐅅HHH	191, 193, 194
	II	Χερρονησῖται	X𐅅HHH	195, 197, 198
	III	Χερρονησῖται	?	201
	IV	Χερρονησῖται ἀπ' Ἀγορᾶς	H	203, 204, 205

NOTES

ΑΙΙΕΙΕΣ: The double Ι in *I.G.* I², 203 is probably a misspelling, and of no significance.

ΑΘΕΝΙΤΑΙ: The Corpus gives under *I.G.* I², 197 a small fragment (EM 5224) transcribed by Hondius and now published by him in his *Novae Inscriptiones Atticae*, with the names [ΠΕΝ] ΑΙ[ΕΣ], ΣΕΡΙΦΙΟΙ, ΔΙΕΣ, ΑΘΕΝΑΙ ΔΙΑΔΕ[Σ], [Λ]ΡΥΛΧΕΣ, and [ΗΕΣΣ] ΤΙΑΙΕ[Σ] (*sic*). Although the fragment belongs to *I.G.* I², 195 rather than to *I.G.* I², 197 (a discussion of the date is not necessary here) it falls within the second assessment period and gives the spelling for ΑΘΕΝΙΤΑΙ in the second period as ΑΘΕΝΑΙ ΔΙΑΔΕΣ, just as it was in the third and fourth periods. The appearance of the form ΑΘΕΝΑΙΟΙ in *I.G.* I², 196 illustrates the tendency of the scribe to give the name of a people instead of the name of a city.

ΑΙΝΕΑΤΑΙ: The variations between ΑΙΝΕΑΤΑΙ, ΑΙΝΕΙΑΤΑΙ, and ΑΙΝΙΑΤΑΙ are not such as to indicate any difference of spelling on the assessment list.

ΑΛΟΠΟΚΟΝΝΕΣΙΟΙ: The variation between ΑΛΟΓΟΚΟΝΝΕΣΙΟΙ and ΑΛΟΠΕΚΟΝΝΕΣΙΟΙ is not such as to indicate any difference of spelling on the assessment list.

ΑΡΚΕΣΕΙΑ: The form ΚΑΡΠΑΘΙΟΝ ΑΡΚΕΣΕΙΑ appears in *I.G.* I², 204 instead of the form ΚΑΡΠΑΘΟΑΡΚΕΣΕΙΑ of *I.G.* I², 202,203, 205. In *I.G.* I², 205 ΑΡΚΕΣΕΙΑ is spelled with a double Σ. These are not significant differences.

ΑΣΣΕΡΙΤΑΙ: This city paid together with Olynthus and Scabala in the first year. The presence or absence of the rough breathing in the record of Assera is of no significance.

ΑΣΤΥΠΑΛΑΙΕΣ: The spelling ΑΣΣΤΥΠΑΛΑΙΕΣ in *I.G.* I², 198 is not significantly different.

ΑΣΤΥΡΕΝΟΙ: The proper restoration for *I.G.* I², 192, 199, and 201 may perhaps be ΑΣΤΥΡΕΝΟΙΜΥΣΟΙ, and if so, the name shows no variation in spelling. The suggested restoration of the Corpus, *I.G.* I², 193, Col. I, line 17 Η[Η] ΑΣΤ[ΥΡΕΝΟΙ] cannot possibly be correct. The other alternative Η[𐅅]ΑΣΤ[ΑΚΕΝΟΙ] should be adopted without question. The ΑΣΤΥΡΕΝΟΙ paid a tithe of only ΠΗΗΗΙΙ in the first period. *Cf.* Dahms' restoration adopted by the Corpus in *I.G.* I², 192, Col. V, line 11.

ΑΥΛΙΑΤΑΙ: The differences between ΑΥΛΙΑΤΑΙ, ΑΥΛΙΕΤΑΙ, and ΟΥΛΙΑΤΑΙ are not such as to reflect a difference of spelling on the assessment list. The spelling ΟΥΛΙΑΤΑΙ (*I.G.* I², 196) was an error of the stonecutter. Compare this with his similar mistake of the same year in writing ΘΑΣΘΟΡΕΣ for ΘΑΣΘΑΡΕΣ, a mistake which he corrected. The form ΑΥΛΙΑΤΑΙΚΑΡΕΣ appears in *I.G.* I², 191.

ΒΑΡΓΥΛΙΕΣ: The spelling in the third period may have been

BAPΛY⊬IETAI. The final E≶ in *I.G.* I^2, 200 is a restoration. In *I.G.* I^2, 203 and 204 read BAPΛY⊬IETAI instead of BAPΛY⊬IE≶, as in the Corpus.

BOTTIAIOI: The name BOTTIAIOI occurs in *I.G.* I^2, 199 in place of the more usual ≶ΓAPTO⊬IOI. *Cf.* p. 260, *supra.*

BOYΘEIE≶: The possible reading [BOYΘE]IA in *I.G.* I^2, 203 for the usual BOYΘEIE≶ has been noted above, p. 260, note 1.

BYΙANTIOI: The double Ι in *I.G.* I^2, 195 is of no significance.

ΛPYΛXE≶ The spelling [Λ]PYΛXE≶ in *I.G.* I^2, 197 on a fragment (EM 5224) belonging to *I.G.* I^2, 195 (see note on AΘENITAI above) is exceptional.

ΔAYNIOTEIXITAI: The variation between ΔAYNIOTEIXITAI and ΔAMNIOTEIXITAI is irregular throughout.

ΔIΔYMOTEIXITAI: The spelling ΔIΔYMOTEXITAI in *I.G.* I^2, 196 is not significantly different.

ΔIKAIA (Eretrian): The irregularity of the spelling ΔIKAIOΓO⊬ITAI in *I.G.* I^2, 205 (*i.e.*, the tendency of the scribe to write the name of the people instead of the name of the town) has been noted above, p. 260.

ΔIKAIAΓAPABΔEPA: This name appears regularly as here quoted, except in *I.G.* I^2, 194, 198, and 205. These exceptions are in the direction of simplicity.

ΔIO≶IPITAI: There is no significance in the different spelling ΔIO≶EPITAI of *I.G.* I^2, 191.

E⊬AIITAI: It seems probable that the long form of this name, E⊬A[IEAΓAPAM], as restored in the Corpus for *I.G.* I^2, 203, represents the reading of the assessment list for the fourth period. The appearance of E⊬AIEA, therefore, in *I.G.* I^2, 205 is an exception in the direction of simplicity. *Cf.* note on ΔIKAIA, *supra.* There is no significance in the difference between E⊬AIA and E⊬AIEA.

E⊬AIO≶IOI (Erythraean): On the analogy of BOYΘEIE≶EPYΘPAI (*I.G.* I^2, 201) this name should be restored in the third period as E⊬AIO≶IOIEPYΘPAI (*I.G.* I^2, 201).

HABΔEPITAI: The omission of the rough breathing has no significance. The name is spelled ABΔEPITAI in *I.G.* I^2, 209 and 218, but so far as is known, the rough breathing is always present during the first four periods.

HAIPAIE≶: The presence or absence of the rough breathing is of no significance. The spelling AIPAIOI in *I.G.* I^2, 205 is an exception to the rule of spelling as given in the table.

HAI≶ONIOI: The spelling HAI≶ONIOI in *I.G.* I^2, 205 is an example of the tendency mentioned above (p. 260) for the scribe to write the name of the people instead of the name of the town. The restoration in *I.G.* I^2, 202 should probably be A[I≶ON] instead of A[I≶ONIOI]. The presence or absence of the rough breathing is of no significance.

ΗΑΛΙΚΑΡΝΑΣΣΙΟΙ: The spelling ΗΑΛΙΚΑΡΝΑΣΙΟΙ in *I.G.* I^2, 194 is an exception to the rule for spelling in the first period. The presence or absence of the rough breathing is of no significance.

ΗΕΣΣΙΟΙ: The presence or absence of the rough breathing is of no significance.

ΗΕΣΤΙΑΙΕΣ: The spelling [ΗΕΣΣ]ΤΙΑΙΕ[Σ] of *I.G.* I^2, 197 (EM 5224) is not significantly different. For the date of this fragment *cf.* note on ΑΘΕΝΙΤΑΙ, p. 28, *supra.*

ΗΕΦΑΙΣΤΙΕΣ: The presence or absence of the rough breathing is of no significance.

ΘΑΣΘΑΡΕΣ: The name appears as ΘΑΣΦΑΡΕΣ in *I.G.* I^2, 196, but the Φ was a stonecutter's error, and one may easily discern from the stone or from a squeeze a dot in the center of the Φ by which the stonecutter corrected it to Θ. *Cf.* note on ΑΥΛΙΑΤΑΙ above.

ΘΕΡΜΑΙΟΙ: There is an exception to the spelling of the first period in the reading ΘΕΡΜΑΙΟΙΕΧΣΙΚΑΡΟ of *I.G.* I^2, 194. In *I.G.* I, 196 and 198 the spelling is simplified to the one word ΘΕΡΜΑΙΟΙ.

ΘΡΑΜΒΑΙΟΙ: This name appears with Scione in the first period as ΣΚΙΟΝΑΙΟΙΚΑΙΘΡΑΜΒΑΙΟΙ (*I.G.* I^2, 192, 194). During the second period, however, and subsequently, the two peoples paid separately. In *I.G.* I^2, 202 the reading of the Corpus transcript for this town is ΘΡΑΝΙΕΣ. Pittakis is the only one who has seen the particular fragment on which this name appeared, and he evidently took what he saw on the stone for a variant on the spelling of ΘΡΑΝΙΕΤΑΙ. Koehler, Urkunden und Untersuchungen, *Abh. der Ber. Akad.*, 1869, p. 34 notices that the ΘΡΑΝΙΕΤΑΙ were from Caria and that hence their name could not have appeared on this fragment. On the general analogy of *I.G.* I^2, 203 he restores with practical certainty ΘΡΑΜ[ΒΑΙΟΙ] in place of the ΘΡΑΝΙΕΣ of Pittakis.

ΙΑΤΑΙ: There is no significance in the difference in spelling between ΙΑΤΑΙ and ΙΕΤΑΙ.

ΚΑΜΙΡΕΣ: There is probably no significance in the difference of spelling between ΚΑΜΙΡΕΣ and ΚΑΜΕΡΕΣ, although the form ΚΑΜΕΡΕΣ may possibly occupy the first period and the form ΚΑΜΙΡΕΣ the second, third, and fourth.

ΚΑΡΒΑΣΥΑΝΔΕΣ: The name in the third period may, of course, have been abbreviated, but the appearance of other long names in this period makes probable the longer form here as well. *Cf.* the records of the Erythraean group and of Elaiea. In the fourth period the use of the long form is clear from *I.G.* I^2, 204, and should be restored, even though in abbreviated form, in *I.G.* I^2, 202, 203, 204 as well. Certainty is, of course, impossible. In *I.G.* I^2, 205,

after the analogy of EΛAIEA and ΔIKAIA we may expect the simple name KAPBAΣYANΔEΣ.

KAPYANΔEΣ: The omission of the Δ in *I.G.* I², 198 was a mistake.

KEΔPIATAI: There is no significance in the difference between the spellings of KEΔPIATAI and KEΔPIETAI.

KEPAMEΣ: The spelling [KEP]AM[E]Σ in *I.G.* I², 194 is an exception to the proposed rule for spelling in the first period.

KΛAIOMENIOI: The double I in *I.G.* I², 195 is probably a mistake, and in any case it is of no significance.

KΛAYNΔEΣ: The transcript of *I.G.* I², 202 in the Corpus alone gives the reading [K]ΛAYNΔI[OI]. The stone itself shows KΛAYNΔE[Σ].

KOΛOΦONIOI: The form KOΛOΦONITAI in *I.G.* I, 193, is an exception.

KYΛΛANTIOI: There is no distinction between the spellings KYΛΛANTIOI and KYΛΛANΔIOI. The name has but one Λ in *I.G.* I², 198.

KYNΔYEΣ: There is no significant difference between the forms KYNΔYEΣ and KINΔYEΣ.

KYPBIΣΣEΣ: The spelling KYPBIΣΣEΣ in *I.G.* I², 194 is an example of the tendency noted on p. 260 above, for the scribe to substitute the name of the people for the name of the town. There is no significant difference in the form KYPBIΣEΣ of *I.G.* I², 198.

ΛAMΠONEIEΣ: In *I.G.* I², 194 the spelling ΛAMΠONEΣ shows that the scribe has written the name of the people instead of the name of the town. The restoration of the Corpus in *I.G.* I², 199 should be changed from ΛA[MΠONEIEΣ] to ΛA[MΠONEIA].

ΛEΦΣIMANΔEΣ: The restoration of the Corpus should be [Λ]EΦΣIMAN[IOI] in *I.G.* I², 193 instead of [Λ]EΦΣIMAN[ΔEΣ]. The restoration in *I.G.* I², 194 should be [Λ]EΦΣ[IMANIOI] instead of [Λ]EΦΣ[IMANΔEΣ]. The restoration in *I.G.* I², 197 should be [ΛEΦΣ]IMA[NΔOI] instead of [ΛEΦΣ]IMA[NΔEΣ]. The restoration in *I.G.* I², 205 should be [ΛEΦΣY]ANΔ[EΣ], which agrees with the rule for spelling and also with the *stoichedon* arrangement of the letters.

ΛIMNAIOI: The spelling ΛIMNIOI in *I.G.* I², 198 is probably an error of the scribe or stonecutter.

MAPONITAI: The spelling MAPONEΣ in *I.G.* I², 195 and the spell-MAPONITAI in *I.G.* I², 204 are exceptions.

MEKYBEPNAIOI: There is no significance in the difference between MEKYBEPNAIOI and MEKYΠEPNAIOI. The spelling with Γ seems more usual, but the stones are not well enough preserved to give very complete evidence.

MENΔAIOI: The spelling MEΔAIOI in *I.G.* I², 196 (449/8) was an error of scribe or stonecutter.

ΜΥΕΣΣΙΟΙ: The name appears as ΜΥΕΙΖΙΟΙ in *I.G.* I², 195. Perhaps this spelling is an error for ΜΥΕΣΣΙΟΙ. If not, the form ΜΥΕΙΖΙΟΙ should be restored throughout the second period.

ΜΥΝΔΙΟΙ: The simple form ΜΥΝΔΙΟΙ is quite clear in *I.G.* I², 196.

ΝΑΧΣΙΑΤΑΙ: The difference in spelling between ΝΑΧΣΙΑΤΑΙ and ΝΑΧΣΙΕΤΑΙ is of no significance.

ΝΕΑΝΔΡΕΙΑ: The spelling throughout the first four periods is always the same. The variation ΝΕΑΝΔΡΕΑ in *I.G.* I², 205 is of no significance.

ΝΕΟΠΟΛΙΤΑΙ (Hellespont): The appearance of the name ΝΕΑΠΟΛΙΣ in *I.G.* I², 198 with a tithe of [Δ]ΠΗΙ[ΙΙΙ] may be referred either to the Hellespontine Neapolis or to Neapolis by Antisara, as in the index of the Corpus. The stone is broken away immediately after the name and it is probable that the restoration should be either ΝΕΑΠΟΛΙΣ[ΠΑΡΑΝΤΙΣΑΡΑΝ] or ΝΕΑΠΟΛΙΣ[ΑΠΑΘΕΝΟΝ], running over, if need be, into the second column, as is allowable in *I.G.* I², 198. Similarly, the item ΝΕ[ΑΠΟΛΙΣ] of *I.G.* I², 196 may belong to the Hellespontine city. The restoration should in that case be ΝΕ[ΑΠΟΛΙΣΑΠΑΘΕΝΟΝ]. If the name is to be referred to the city by Antisara, the restoration should be ΝΕ[ΑΠΟΛΙΣ-ΠΑΡΑΝΤΙΣΑΡΑΝ]. In *I.G.* I², 200 the name ΝΕΑΠΟΛΙΣ occurs twice, once as [ΝΕΑΠΟ]ΛΙΣ and once as ΝΕΑΠΟ[ΛΙΣ] with a tithe of ΔΠΗΙΙΙΙ. On the assumption that the Hellespontine city kept its distinctive epithet this latter item may be restored as ΝΕΑΠΟ[ΛΙΣΑΠΑΘΕΝΟΝ]. This leaves the name [ΝΕΑΠΟ]ΛΙΣ for Neapolis by Antisara, and neither name need now be referred to the Mendaean Neapolis, as in the index of the Corpus. This distribution conforms well with the rules for spelling, for in *I.G.* I², 200 the Mendaean Neapolis should be represented by the form ΝΕΟΠΟΛΙΤΑΙ, and not ΝΕΑΠΟΛΙΣ. In *I.G.* I², 203 the restoration of the Corpus should be ΝΕΑΠ[ΟΛΙΣ-ΑΠΑΘΕΝΟΝ] or some abbreviation of it instead of ΝΕΑΠ[ΟΛΙΣ].

ΝΕΟΠΟΛΙΤΑΙ (by Antisara): The restoration in *I.G.* I², 196 should be ΝΕ[ΑΠΟΛΙΣΠΑΡΑΝΤΙΣΑΡΑΝ]. Or perhaps it should be ΝΕ-[ΑΠΟΛΙΣΑΠΑΘΕΝΟΝ], in which case its record belongs to the Hellespontine list. The name ΝΕΟΠΟΛΙΤΑΙ of *I.G.* I², 197 belongs to the Mendaean Neapolis and not to the Neapolis by Antisara, as assigned in the old Corpus. For the name in *I.G.* I², 198 *cf.* note above on the Hellespontine city. The item from *I.G.* I², 200 to be referred to Neapolis by Antisara is [ΝΕΑΠΟ]ΛΙΣ, with tithe not recorded. The amount ΔΠΗΙΙΙΙ may be restored, however, with certainty. So far as is known the quota of Neapolis by Antisara was always the same.

ΝΕΟΠΟΛΙΤΑΙ (Mendaean): The entry ΝΕΟΠΟΛΙΤΑΙ|ΕΚΠΑΛΛΕΝΕΣ of *I.G.* I², 194 is an exception to the norm of spelling established by *I.G.* I², 191. In *I.G.* I², 195 the name appears as ΝΕΟΠΟΛΙΤΑΙ|

ΜΕΝΔΑΙΟΝΑΓΟΙΚΟΙ, which differs from the simple form ΝΕΟΓΟ-ΛΙΤΑΙ of *I.G.* I², 196, 197. The entry in *I.G.* I², 197 has been wrongly assigned to Neapolis by Antisara in the old Corpus. In *I.G.* I², 200 neither appearance of ΝΕΑΓΟΛΙΣ belongs to the Mendaean city. In *I.G.* I², 204 the form [ΝΕΑΓΟΛ]ΙΣ|[ΜΕΝΔΑΙ]ΟΝ is an exception (*cf.* p. 260 *supra*).

ΟΙΝΑΙΟΙ: The record of this name shows changes in spelling. Probably the name on the assessment list in the first and second periods was ΟΙΝΑΙΟΙΕΝΙΚΑΡΟΙ and the change was made to ΟΙΝΑΙΟΙΕΧΣΙΚΑΡΟ in the third and fourth. The form ΟΙΝΑΙΟΙΕΧΣ-ΙΚΑΡΟ, then, in *IG.* I², 194 is exceptional. In *I.G.* I², 196 and 198 the descriptive epithet is omitted (*cf.* note on ΘΕΡΜΑΙΟΙ above). There is another anomalous form ΟΙΝΑΙΟ[Ι]ΙΚΑΡ in *I.G.* I², 203.

ΓΑΚΤΥΕ: The name appears as ΓΑΚΤΥΕΣΙΔΥΜΕΣ in *I.G.* I², 192 and as ΓΑΚΤΥΕ in *I.G.* I², 194. In the second period ΓΑΚΤΥΕ disappears and ΙΔΥΜΕΣ appears alone.

ΓΑΡΓΑΡΙΟΤΑΙ: The name is regularly spelled ΓΑΡΓΑΡΙΟΤΑΙ. The form ΓΑΡΓΑΡΙΟΙ in *I.G.* I², 203 was probably an error.

ΓΕΔΙΕΣ: This name occurs in the third and fourth periods as ΓΕΔΙΕΣΕΛΛΙΝΔΟΙ. The form ΓΕΔΙΕΣΕΛΛΙΝΔΟ of *I.G.* I², 204 is an exception. In *I.G.* I², 200 the Corpus restoration ΓΕ[ΔΙΕΣ] should probably be changed to read ΓΕ[ΔΙΕΣΕΛΛΙΝΔΟΙ].

ΓΕΛΕΙΑΤΑΙ: There is no significance in the difference of spelling between ΓΕΛΕΙΑΤΑΙ and ΓΕΛΕΑΤΑΙ.

ΓΕΡΚΟΣΙΟΙ: The spelling ΓΕΡΚΟΣΙΟΙ in *I.G.* I², 205 is an evidence of the tendency already noted (p. 260, *supra*) for the scribe to write the name of the people instead of the name of the city.

ΓΟΛΙΧΝΙΤΑΙ: The spelling ΓΟΛΙΧΝΙΤΑΙ in *I.G.* I², 197 is exceptional. The restorations in *I.G.* I², 204 and 205 should be ΓΟΛΙΧΝΙΤΑΙ instead of the form ΓΟΛΙΧΝΑΙΟΙ as in the Corpus.

ΓΟΤΕΙΔΕΑΤΑΙ: The restoration of the Corpus ΓΟΤ[ΕΙΔΑΙΑ] in *I.G.* I², 202 should be changed to read ΓΟΤ[ΕΙΔΕΑΤΑΙ]. There is no authority from the tribute lists for the form ΓΟΤΕΙΔΑΙΑΤΑΙ given in the index of the old Corpus.

ΓΡΙΑΝΕΣ: There is no significance in the difference in spelling between ΓΡΙΑΝΕΣ and ΓΡΙΕΝΕΣ.

ΓΤΕΛΕΟΣΙΟΙ: In the first, second and fourth periods this name appears as ΓΤΕΛΕΟΣΙΟΙ. It was spelled ΓΤΕΛΕΟΣΙΟΙΕΡΥΘ in the third period (*I.G.* I², 201), perhaps with variants on that abbreviation.

ΓΥΛΑΛΕΣ: There is no significance in the difference between ΓΥΛΑΛΕΣ and ΓΥΛΕΛΕΣ.

ΡΕΝΑΙΕΣ: This name is regularly spelled ΡΕΝΑΙΕΣ. The appearance of the form ΡΕΝΑΙΟΙ in *I.G.* I², 202 is exceptional. Or perhaps the spelling of the fourth period was ΡΕΝΑΙΟΙ. In this

case the form PENAIEΣ of *I.G.* I², 204 is exceptional and the form [PENAIOI] should be restored in *I.G.* I², 205.

ΣΕⱵΥΜΒΡΙΑΝΟΙ: The spelling ≻ΕⱵΥΝΒΡΙΑΝΟΙ in *I.G.* I², 194 was probably an error. In any case it can hardly be of significance.

ΣΕΡΜΑΙΟΙ: The spelling ≻ΕΡΜΑΙΟΙ in *I.G.* I², 195 is exceptional. It may be well to note here also that the identification of Serme and Sermylia (as in Pauly-Wissowa, *s.v. Sermyle*) is unfounded and in direct contradiction of the epigraphical evidence.

ΣΙΛΛΙΟΙ: The spelling ΣΙΝΛΙΟΙ is not significantly distinct from ΣΙΛΛΙΟΙ. In *I.G.* I², 196 the form ΣΙΛΑΙΟΙ is a stonecutter's error or misspelling of ΣΙΛΛΙΟΙ. *Cf.* Koehler, *op. cit.*, p. 169.

ΣΙΔΟΣΙΟΙ: In the first, second and fourth periods this name is spelled ΣΙΔΟΣΙΟΙ. In the third period it appears as ΣΙΔΟΣΙΟΙ-ΕΡΥΘΡΑΙ (*I.G.* I², 201).

ΣΚΑΦΣΑΙΟΙ: The spelling ΣΚΑΦΣΙΟΙ in *I.G.* I², 205 was probably a mistake, and has no significance. The form ΣΚΑΦΣΑΙΟΙ appears twice in *I.G.* I², 198 and probably represents a double entry for the Thracian city. There is no need to refer one of the items to the ΣΚΑΦΣΙΟΙ of the Hellespont.

ΣΚΙΟΝΑΙΟΙ: Throughout the first period this name was recorded together with ΘΡΑΜΒΑΙΟΙ. Subsequently it appeared alone.

ΣΤΟⱵΙΟΙ: The joint payment of Stolus and Mecyberna apparently lasted only one year.

ΣΥΑΛΛΕⱵΕΣ: At the beginning of the third period (*I.G.* I², 199) the ΣΥΑΛΛΕⱵΕΣ and ΑΜΥΝΑΝΔΕΣ are listed as paying together. This is the last appearance of the ΑΜΥΝΑΝΔΕΣ, and they were probably absorbed by the ΣΥΑΛΛΕⱵΕΣ as far as relations with Athens were concerned. There is no significance in the difference in spelling between ΣΥΑΝΛΕⱵΕΣ (*I.G.* I², 200) and ΣΥΑΛΛΕⱵΕΣ. The form ΠΙΚΡΕ≻≻ΥΑΝ[ΛΕⱵΕΥ≻] appears in *I.G.* I², 191. The form ≻Υ[ΑΛΛΕⱵΕ≻]Η[ΟΝ – – – ΑΡΧΕΙ] appears in *I.G.* I², 195.

ΤΕΙΙΟΙ: There is no significant difference between the forms ΤΕΙΙΟΙ and ΤΕΙΟΙ.

ΤΟΡΟΝΑΙΟΙ: The form ΚΟΡΟΝΑΙΟΙ in *I.G.* I², 202 is an error.

ΤΥΡΟΔΙⱵΑ: This name appears as ΤΥΡΟΔΙⱵΑΙ in *I.G.* I², 193, and as ΤΥΡΟΔΙⱵΑ in *I.G.* I², 199 and 200.

ΦΑΡΒΕⱵΙΟΙ: The spelling ΦΑΡΒΕⱵΟΣ occurs in *I.G.* I², 201 in place of the more usual ΦΑΡΒΕⱵΙΟΙ. *Cf.* note on Pharbelus above, p. 260.

ΦΕΛΕΤΙΟΙ: The variations of spelling, ΦΕΛΟΝΤΙΟΙ (*I.G.* I², 200), and ΦΕΛΕΝΤΙΟΙ (*I.G.* I², 201), are of no significance.

ΧΑⱵΚΕΑΤΑΙ: There is no significance in the differences of spelling between ΧΑⱵΚΕΑΤΑΙ, ΧΑⱵΚΙΑΤΑΙ, and ΧΑⱵΚΕΙΑΤΑΙ.

ΧΑⱵΧΕΔΟΝΙΟΙ: The restorations of ΚΑ[ⱵΧΕΔΟΝΙΟΙ] 𐅅ΗΗΗΗ in *I.G.* I², 194 and 195 belong to Kamires (*cf.* pp. 249–50, *supra*).

ΧΑΛΧΕΔΟΝΙΟΙ appears first as ΚΑΛΧΕΔΟΝΙΟΙ in *I.G.* I², 203, but the difference between initial Χ and Κ was apparently not significant of the spelling on the assessment list. There is no authority for the spelling ΧΑΛΚΕΔΟΝΙΟΙ as cited in the index of the Corpus.

ΧΕΡΡΟΝΕΣΙΟΙ: The name is spelled ΧΕΡΣΟΝΕΣΙΟΙ in the first period (*I.G.* I², 193) and ΧΕΡΡΟΝΕΣΙΟΙ in subsequent periods.

ΧΕΡΡΟΝΕΣΙΤΑΙ: The spelling ΧΕΡΡΟΝΕΣΙΤΑΙ in *I.G.* I², 194 is an exception. If the spelling ΧΕΡΣΟΝΕΣΙΤΑΙ is taken as standard for the first period, then the entry in *I.G.* I², 191 should be restored to read [ΧΕΡΣΟΝΕΣ]ΙΤΑΙ. In the fourth period the restoration of *I.G.* I², 203 should be Χ[ΕΡΡΟΝΕΣΙΤΑΙΑΠΑΛΟΡΑΣ] or some abbreviation of it. The entry in *I.G.* I², 205 was probably the one name ΧΕΡΡΟΝΕΣΙΤΑΙ, after the analogy of Elaiea, Dikaia, and Karbasyandes.

The above tabulation of changes in spelling on the quota lists of the first fifteen years shows that variation in spelling is a legitimate and very useful help in determining tribute assessment periods. It also shows the possible danger of relying too much on a change of spelling. Exceptions in the above table are relatively much more numerous than exceptions in the amounts of tithe recorded. And yet this is but natural. After all, the important item to be recorded was the amount of the tithe, and the scribe was not necessarily so careful in copying the name of the town or people. Some obvious changes could hardly escape his notice, and the quota lists reflect perfectly the spelling of the assessment decrees. Small matters like the rough breathing or the interchanging of an Ι or Ε or even ΕΙ are of no significance whatsoever. And yet there are at times changes of greater importance which fail entirely to conform to the theory of assessment periods. The student of the above table must be prepared for an unusually long list of exceptions. I can only argue that this is, *in re ipsa,* natural. And I present the table in full to speak for itself.

The argument in favor of the proposed theory of determining assessment periods by the spelling of the name does not, however, rest on explaining away the exceptions noted above. It rests on the fact that the *great majority* of significant changes in spelling indicate exactly the same assessment periods as are indicated by the changes in tithe.

The following is a list of those cities which conform without a single exception to the theory as proposed in this paper: Ἀζειῆς, Βαργυλιῆς, Βερύσιοι, Βουθειῆς, Διῆς ἀπὸ Κηναίου, Διῆς ἀπὸ τοῦ Ἄθω, Ἐλαιούσιοι, Σκιωναῖοι καὶ Θραμβαῖοι, Καρβασυανδῆς, Ληψιμανδῆς, Μυριναῖοι, Ναξιᾶται, Νεάπολις ἀπ' Ἀθηνῶν, Νεάπολις παρ' Ἀντισάραν, Ποτείδαια, Πρίαπος, Πτελεούσιοι, Σερμυλιῆς, Σιδούσιοι, and Χερρονήσιοι.

I have not included the names of those cities where the exceptions

may be easily explained. They are: *Ἀθῆναι Διάδες, Δίκαια Ἐρετριῶν, Δίκαια παρ' Ἄβδηρα, Αἰσώνιοι, Θερμαῖοι, Κυρβισσός, Λαμπωνειῆς, Οἰναῖοι, Ἐλαιέα*, and *Περκώτη*.

And finally, I should like to select as particularly significant and indicative of the tribute assessment periods given in this paper the records of *Διῆς ἀπὸ Κηναίου, Διῆς ἀπό τοῦ Ἄθω, Ληψιμανδῆς, Μυριναῖοι, Ναξιᾶται, Ποτείδαια*, and *Πρίαπος*.

The principal conclusions reached in this discussion may now be summarized as follows:

(1) Irregular amounts of tithe recorded in *I.G.* I², 198 cannot be used as evidence against the theory of tribute assessment periods.

(2) Slight variations in tithe cannot be used as evidence against the theory of tribute assessment periods.

(3) Tribute assessment periods may be determined not only by changes in the amounts of recorded tithe but also by changes in the spelling of the names of cities.

(4) Tribute reassessments in the first fifteen years occurred in 450/49, in 446/5, and in 443/2.

(5) The reassessment of 443/2 is indicated, in part, by the introduction of the five geographical divisions: Ionic, Hellespontine, Thracian, Carian, and Nesiot. Fragment 2 (Mueller, *F.H.G.*) of Craterus of Macedon belongs to the assessment list of 443/2.

(6) The reassessments were *general* reassessments and included the names of all cities, not merely the names of those whose tribute was changed.

Benjamin D. Meritt

Princeton University

ADDENDA

1. *To pages 249 and 250.*[1]
2. *To page 251.*[2]

[1] That this was not the full assessed tribute of Chalcedon is shown by the discovery of a new fragment (EM 4488), as yet unpublished, belonging to *I.G.* I², 196, which gives the tithe of Chalcedon as 𐅅HHHH. The name is spelled Χα[λχηδόνιοι] *Cf.* p. 250.

[2] I do not know why the Corpus restores 𐅅HHHH. It never appears as the tithe of Mende except by mistake in *I.G.* I², 213.

See *addenda et corrigenda* of Corpus, p. 303.

THE ROMANO-BRITISH COLLECTION IN THE ROYAL ONTARIO MUSEUM OF ARCHAEOLOGY

THE Royal Ontario Museum has a growing Romano-British collection, which it hopes to make eventually as complete as possible a record of life in Britain during the nearly four centuries of the Roman occupation, 43 to 410 A.D. This collection has a peculiar interest because, so far as I know, it is the only one of its kind on this continent. Moreover, although Romano-British art does not show a high degree of merit, it has a decided character of its own. As has been said, Britain was a small province, remote from Rome, and by

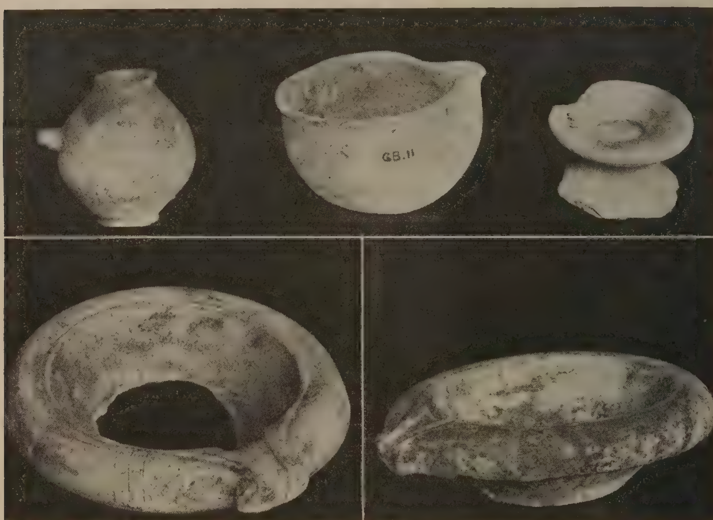

FIGURE 1. CHILD'S FEEDING BOTTLE, CRUCIBLE, CANDLESTICK, AND MORTARS: TORONTO

no means wealthy. It did not reach the higher developments of city life, of culture, and commerce, which we meet abundantly in more favored lands, in Gaul, in Spain, and in Africa. Nevertheless it had its own character and when the whole story of Roman Britain is told by the excavations it will be a real contribution to our knowledge of Roman life.

For almost four centuries a process of Romanization went on in the island. This process was not merely a veneer which affected the wealthier classes only, for as Mr. Haverfield has pointed out, even in the huts of the poorest peasants, rude hypocausts and painted wall decorations, Roman pots, and Samian ware have been found.[1] So

[1] *The Roman Occupation of Britain*, p. 236.

thorough was this Romanization that it affected even the language of the people. Tacitus tells us that in the Flavian age Latin became popular. Archaeological remains testify that even the poorer classes were familiar with it, for as Mr. Haverfield says:[1] "When a weary brickmaker of Calleva scrawls SATIS with his finger on a tile . . . or a rude brick shows the word PVELLAM—probably part of an amatory sentence otherwise lost—. . .we may be sure that the lower classes of Calleva used Latin alike at their work and in their more frivolous moments." In the fifth century the Saxon invader and other enemies blotted out this Romano-British civilization to such an extent that almost the only traces of it are the objects which were left in the soil of Britain. These include practically all of the things which man used in his daily life and to these we must turn for information on Roman Britain.

By far the most numerous remains are those of pottery which is ubiquitous. It has been found in considerable quantities on almost every Romano-British site in England from the Roman Wall to the Isle of Wight and from Exeter to Norfolk. The making of pottery was, no doubt, one of the largest of Romano-British industries, although the manufacture seems to have been confined chiefly to a few centres, Castor, the New Forest, and probably the Kent marshes. Pottery was skilfully made in Britain long before the Romans came, and the pre-Roman British or Celtic civilization had developed a style of its own with certain marked characteristics of shape and decoration.[2] The invading Romans brought with them *terra sigillata* and a coarse pottery. In the second century, the two styles in pottery fused and developed wholly new Romano-British types derived from both alike.

Especially characteristic Romano-British pieces are the small black drinking cups, 2 to 3 inches high, of which the Toronto collection includes a number from the City of London. They have rather intriguing forms with gracefully curving sides and universally small bases and bear a much closer resemblance to their Celtic ancestors than to anything Greek or Roman.

Of Upchurch pottery the collection has several good examples, including a thumb-pot. The most important, perhaps, is an ovoid olla,[3] of dark grey ware, which was found in London and is decorated round the body with a network of intersecting lines forming a lattice pattern.[4] Curle thinks pieces of this kind belong to the Antonine

[1] *The Romanization of Roman Britain*, p. 25.
[2] Collingwood, *Roman Britain*, p. 69 ff.
[3] Accession No. GB. 40, height, 7½ in.
[4] For similar vases cf. Walters, *Catalogue of Roman Pottery in the British Museum*, p. 417, fig. 273 and M 2658, M 2660–2666; Thomas May, *Roman Pottery in the York Museum*, published in *The Report of the Yorkshire Philosophical Society*, 1908–1912, pl. XXI b, 12; Wright, *The Celt, the Roman, and the Saxon*, p. 261; Curle, *A Roman Frontier Post and Its People, The Fort at Newstead*, p. 19, and pl. IV, 1; and Ward, *The Roman Era in Britain*, p. 166, fig. 45, Nos. 4, 5, and 9, and p. 168.

period,[1] but Walters assigns these vases with scored patterns to the first century.[2]

The collection contains also several small bowls and jugs and a number of fragments of *terra sigillata*, some stamped with the name of the potter, fragments of New Forest pottery and a number of pieces of coarse ware including cooking pots and cinerary urns, a honey pot from Silchester, oil flasks and jugs, a candlestick, a crucible (Fig. 1), and a child's feeding bottle (Fig. 1) of drab smooth pipe clay which is from the City of London and dates from the second century A.D.[3] A feeding bottle of somewhat similar form was found in a child's grave group which may be seen in the Joslin Collection in the Colchester Museum.

The most interesting pieces of coarse pottery in the collection are three mortars (Fig. 1). The *mortarium* or *pelvis*, as it is sometimes called, is an important and a very common kitchen utensil which was used for mashing and mixing vegetables and other food. It is mentioned by Plautus,[4] by Cato,[5] by Columella,[6] and by Vergil.[7] It is frequently referred to also in the *de re coquinaria* of Apicius.[8] Mortars found in Roman Britain are chiefly of one prevailing type, a shallow bowl with a broad, more or less curved overhanging rim, a shallow spout, and a comparatively small foot. This small base naturally rendered the vessel unsteady if it merely rested on the table, hence Mr. Ward suggests that the necessary stability for use with a pestle was secured by fitting the mortar into a hole on the kitchen table.[9] Another suggestion is that the vessel may have been held between the knees of the cook.

Romano-British mortars are usually made of a clay that is coarse in texture but compact and heavy. This may imitate stoneware as a mortar of this material is exhibited in the British Museum.[10] The color varies from drab or fawn to a buff yellow or a creamy white; the size runs from seven inches to more than a yard in diameter. The surface of the interior often has small bits of siliceous stone or broken quartz imbedded in it to render the mortar more durable and also to aid in the process of trituration. These vessels have seen such hard service that, notwithstanding this reinforcement, many of them, like two in the Toronto collection, have been entirely worn

[1] *Op. cit.*, pl. XLVIII, 48 and p. 254.
[2] *Catalogue of Roman Pottery in the British Museum*, Introduction, LII.
[3] Accession No. GB. 2, height, $2\frac{7}{8}$ in.
[4] *Aulularia*, 95, *Pistillum, mortarium,*
Quae utenda vasa semper vicini rogant.
[5] *De re rustica*, 74 ff.
[6] XII, 56, 59.
[7] *Moretum*, 93 ff.
[8] *De re coquinaria*, IV, 2, *Patina de asparagis frigida. Accipies asparagos purgatos in mortario fricabis.*
[9] *The Roman Era in Britain*, p. 173.
[10] *A Guide to the Antiquities of Roman Britain*, p. 123.

through at the bottom. Mortars are usually dated by their rims which are of three types, the roll and bead, the hammer-head, and the vertical.[1] All of those in the Royal Ontario Museum are of the earliest type, and belong to the first century A.D. These vessels are frequently stamped with the name of the potter placed in a small panel, impressed transversely across the rim. Two of those in Toronto bear the names of their makers. One[2] is made of heavy yellowish white clay and has the inscription SOLLVS F., *Sollus f(ecit)* (Fig. 1). Above and below the inscription is a herringbone pattern. The name Sollus, which frequently appears on these vessels, seems to have been especially associated with London where this particular mortar was found. In the London Museum there are two with this same stamp, and another in the Guildhall Museum.[3] There are several of these vessels or fragments of them, examples of the work of Sollus, in the British Museum.[4] Our mortar simply adds another to the list of the works of Sollus found in London.[5]

The second inscribed mortar[6] is of coarse buff colored ware and has been worn through at the bottom (Fig. 1). It was also found in London. On one side of the lip the name "MATVGENVS" is stamped in two lines; on the other side is "FECIT." In the British Museum there are several fragments of mortars bearing the name of this potter.[7] A mortar in the Guildhall Museum with the letters TVGENV may also be the work of Matugenus.[8] Matugenus was a potter, who not only made mortars, but worked in *terra sigillata* as well.[9] The seat of his activity was Montans in Southern Gaul and the time of his work ranges from Nero to Vespasian. Although found in London this mortar was probably made in Gaul. The third mortar in the Toronto collection has no potter's stamp.

The most interesting, the finest, and the most typical Romano-British pottery is the Castor ware, which is made of a white paste-like or a red clay with a dark slate-colored slip and frequently has ornamentation in relief, applied by the barbotine process. The chief centre of manufacture was Durobrivae in Northamptonshire, a site now occupied by an obscure village called Castor from which the ware takes its name. There Mr. Artis discovered remains of potteries extending, as he says, over an area of twenty square miles.

[1] Ward, *op. cit.*, p. 173.

[2] Accession No. GB. 25, height, 3½ in.; diameter, 11¼ in.

[3] *Catalogue of the Collection of London Antiquities in the Guildhall Museum*, p. 102, No. 621.

[4] Walters, *op. cit.* p. 432f., M 2799–2802 and M 2805. Of these M 2799, 2802, and 2805 were found in London.

[5] For Sollus cf. also *C.I.L.* VII, 1334, 54, and 1336, 1084–1086.

[6] Accession No. GB. 60, height, 3⅜ in.; diameters, 13 and 12 in.

[7] Walters, *Catalogue of the Roman Pottery in the British Museum*, M.2786–2789 and possibly M.2782; *C.I.L.* VII, 1334, 34a and 34b.

[8] *Catalogue of the Collection of London Antiquities in the Guildhall Museum*, p. 103, No. 639.

[9] Oswald and Pryce, *Terra Sigillata*, p. 211.

The Royal Ontario Museum is very fortunate in possessing several excellent examples of Castor ware. One of these[1] is a beaker of the "thumb-pot" type (Fig. 2a), which is made of red clay with a surface slip of dark slate color, has a small foot and very thin walls and was found at Castor. Round the body are seven broad vertical indentations or "thumb marks"; on the ridges between these depressions are rows of overlapping scales in relief.[2] The vase was, no

FIGURE 2a. BEAKER WITH "THUMB-MARKS": TORONTO

FIGURE 2b. CUP WITH DECORATION IN OPAQUE WHITE: TORONTO

doubt, used for drinking; the indentations may have enabled the drinker to hold it more securely.

A second vase[3] from Coggeshall, Essex (Fig. 2b), illustrates another type of ware which is found at Castor. It is of red clay, turned very thin, and has a dark brown to slate-colored slip. Round the body is a band of decoration, $2\frac{1}{2}$ inches wide, of beautiful scroll-like tendrils with berries in groups of three, painted in thick, opaque white. Above and below the decorative band is a row of roulette hatching. There is a similar vase in the British Museum.[4]

[1] Accession No. GB. 63, height, $6\frac{7}{8}$ in.

[2] For vases very similar to this cf. *The Victoria History of the Counties of England, Northampton*, Vol. I, fig. 32, where an almost identical vase found near Castor, now in the Peterborough Museum, is shown; also, Walters, *Catalogue of Roman Pottery in the British Museum*, p. 424, fig. 279, M 2734, which was found near Peterborough; and Artis, *Durobrivae*, pl. 53, fig. 1, and *Thoroton Soc. Trans.* X, pl. 1, No. 7, for another found at Brough, Notts, which appears to be of local fabric.

[3] Accession No. GB. 43, height, $6\frac{7}{8}$ in.

[4] Cf. *The Victoria History of the Counties of England, Berkshire*, Vol. I, pl. facing p. 206, for a slightly similar vase in the Reading Museum.

The most elaborate specimens of Castor ware are the so-called hunt-cups, on some of which are depicted rather spirited scenes of the chase, with animal and human figures in relief.[1] The dog, the hare, and the deer appear frequently, and other animals occur also; a lion on a fragment in the British Museum, a leopard on a piece in the Colchester Corporation Museum, and dolphins and other fish are sometimes shown. Rarer than animals and less successful in their portrayal are human figures.[2]

Perhaps the most famous of these cups, which were made from 135 to 200 A.D., is the well known Colchester vase.[3] The frieze of decoration on it is divided into three scenes, a hunting scene, a gladiatorial combat, and a third scene showing two men training a

FIGURE 3. "HUNT-CUP" OF CASTOR WARE: TORONTO

dancing bear. A fine Castor beaker in the British Museum represents a race of four-horse chariots.[4] Even mythological subjects, such as Hercules rescuing Hesione, are infrequently depicted,[5] and a fragmentary vase from Chesterford in Essex shows figures of Jupiter, Mars, Mercury, and Venus.[6]

Castor vases with animal figures are not numerous and those show-

[1] Haverfield, *The Victoria History of the Counties of England, Northampton,* Vol. I, fig. 34.

[2] Haverfield, *The Roman Occupation of Britain*, p. 244.

[3] Walters, *History of Ancient Pottery,* II, p. 544; Roach-Smith, *Collect. Antiq.*, IV, pl. 21, p. 82; *The Victoria History of the Counties of England, Northampton,* I, p. 211; *C.I.L.* VII, 1335, 3.

[4] Walters, *Catalogue of Roman Pottery in the British Museum,* M 2479, p. 397, pl. XVI; Walters, *History of Ancient Pottery,* II, p. 545, pl. LXIX.

[5] Haverfield, *The Roman Occupation of Britain,* p. 244, fig. 64.

[6] Walters, *History of Ancient Pottery,* II, p. 545.

ing human figures are decidedly rare. Therefore we are very fortunate in having one fine example on this side of the Atlantic. This[1] is a large jar of the "hunt-cup" type (Fig. 3), but its size makes it rather doubtful that it was used as a beaker.[2] It was discovered in 1841, on the estate of the Duke of Bedford at Bedford Purlieus in Northampton inside a large urn of local clay, 30 in. high, which contained also human bones and some glass and Samian ware. Nearby were found two torsos which are at Woburn Abbey. The vase was purchased in 1920 by the Royal Ontario Museum, from a dealer in London who had acquired it from the collection of the late Bennett Goldney, M.P., and presented by Robert Mond, Esq.

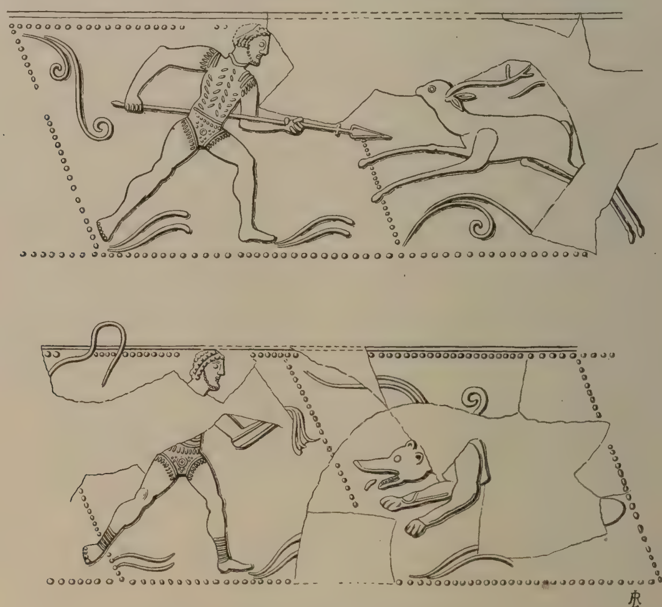

FIGURE 4. SCENES ON THE "HUNT-CUP" SHOWING HUNTING AND TRAINING OF ANIMALS: TORONTO

It is made of a white paste-like clay covered with a dark slate-colored slip. It has been broken and is partly restored. The most interesting feature is the decorative band which encircles the jar showing two scenes in relief. On one side is the figure of a bearded man who wears a sleeveless garment with short trunks and holds a spear with which he attacks a deer, which runs towards him, and which we may presume is being pursued by dogs not shown in the picture (Fig. 4). Foliate designs suggest a woodland background to

[1] Accession No. GB. 51, height, 11 in.

[2] This vase has previously been published in *Gentleman's Magazine*, II, 1841, p. 528; *Proceedings of the Society of Antiquaries*, ser. I, 1, 151; C. Roach-Smith, *Collectanea Antiqua*, IV, 90; *Archaeologia*, XXXII, pp. 1–13; A. H. Smith, *Catalogue of the Sculpture at Woburn Abbey*, Nos. 70, 76; Haverfield, *The Victoria History of the Counties of England, Northampton*, I, 1902, p. 190, and fig. 18.

the chase. On the other side is a second male figure, who in addition to his abbreviated garment, wears ankle protectors. The upper part of his body is missing but a part of the long lash with which he threatens the beast facing him is still left. This animal, of which only the forepart remains, has its mouth open and its tongue out. It is probably a thick set dog or a wolf, although it bears some resemblance to the bear on the Colchester vase. Rows of beading separate the figures and define the frieze above and below. Lower down are two rows of hatching made by a roulette.

What is the interpretation of these pictures? The scenes depicted on the Colchester vase are said to represent festivities of the thirtieth legion at its post on the Rhine. The scenes on the Toronto vase are certainly very similar in subject to two on the Colchester urn; a hunting scene, and a man with a lash attacking or training a large beast. Friedlander says[1] that *venationes*, of which the Romans were passionately fond, were given throughout the empire in the minor towns, and that under Augustus animal training had become a regular profession. It seems at least possible then that we have here local performances representing the hunting and training of animals. It is possible that the two torsos, which were found with the vase, representing youths clad in short tunics, each holding a whip, may have been hunters or animal trainers.

Space permits only a few words in regard to the place of manufacture of Castor ware. The chief centre in Britain was at Roman Durobrivae. It was found also on the continent, especially along the lower Rhine and Walters thinks that it was introduced into Britain from Germany.[2] The Colchester vase is considered a German importation. However, as Mr. Haverfield says,[3] "Such a vase is an exception. In general our knowledge of many details is far too slight to justify even a guess how extensively and on how many sites Castor ware was produced. We must be content with saying that it was well known both in Britain and in northern Gaul, and that Castor was beyond question a most important centre of its manufacture." The Toronto vase, which was found so near Castor, adds weight to this statement.

Iron tools of the Roman period, many of which were probably made in the country, have been found in England. Ironstone lies accessible near the surface in many parts of Northampton and it is not improbable that it was worked there and elsewhere during Roman days.[4] Two large hoards of iron tools, one containing sixty,

[1] *Darstellungen aus der Sittengeschichte Roms*, II, p. 399 and p. 405.
[2] *Catalogue of Roman Pottery in the British Museum*, Introduction, L.
[3] *The Victoria History of the Counties of England, Northampton*, I, p. 211.
[4] Haverfield, *The Victoria History of the Counties of England, Northampton*, I, p. 206; and also, *The Roman Occupation of Britain*, p. 258.

the other over one hundred objects, were found at Silchester and are in the Reading Museum.[1] One of these comprises a complete set of smith's tools. The Royal Ontario Museum has a blacksmith's anvil from Bath[2] which has a rectangular face on top and tapers towards the bottom.[3] Smith's anvils of this type seem to be rather rare. Another iron tool in the collection is a shoe for a spade, from Yorkshire.[4] It is merely the cutting edge which was attached to an upper part of wood. This type persisted probably as long as iron was dear for a similar spade of the 16th century is shown in a collection of

FIGURE 5. STATUETTE OF HERCULES: TORONTO

FIGURE 6. BRONZE STATUETTE OF AN ATHLETE: TORONTO

mining implements in the Museum of the Royal Institution of Cornwall, Truro.[5] The Toronto collection has, also, several iron carpenter's nails with square section and circular heads from the Folkestone villa and from Alfoldean.

Roman bronzes were imported into Britain even before the coming of the Romans, as a beautiful griffin and some other pieces in the Colchester Museum, which were excavated in 1924 from a pre-Roman tumulus in Essex, bear witness. Such large pieces as the colos-

[1] *Short Guide to the Silchester Collection*, pl. II, p. 23, 6th edition, 1920.
[2] Accession No. GB. 55, height, 8 in.; top, $5\frac{1}{2}$ by $4\frac{3}{4}$ in.
[3] For a smaller anvil of similar form in a set of smith's tools Cf. Curle, *op. cit.*, pl. LXIII, 10; also S. Reinach, *Catalogue illustré du musée des antiquités nationales au château de Saint Germain-en-Laye*, tome I, fig. 275, No. 49838.
[4] Accession No. G. 491, length, 9 in.
[5] *Archaeological Journal*, XXXI, 1874, pl. opposite p. 57.

sal head of Hadrian in the British Museum were, of course, extremely rare, but smaller bronzes were not infrequent in Roman Britain. The present collection contains two statuettes. One is a tiny Hercules, (Fig. 5), which was found in Sussex, and presented by Thomas Sutton, Esq.[1] He stands in characteristic pose, with left foot advanced, a lion's skin over his left arm and his right arm upraised as if wielding his club. A very similar Hercules found at the Royal Exchange, now in the London Museum, is said to be of Gaulish workmanship. Judging by the frequency of his appearance, Hercules must have been a popular hero in Roman Britain. The second statuette[2] is a charming little figure, found at Eastbourne, which is much more finely modelled and has a fine dark green patina (Fig. 6). He stands in rhythmic pose and holds a small round object in his left hand. He is probably an athlete, though one feels tempted to call him Paris with the famous apple. The other bronzes in Toronto are a dome-shaped bell, said to have been found at Winchester and almost identical to a bell in the British Museum,[3] a charming little key, and several lamps.

Just a word about coins, for no Romano-British collection would be complete without at least a few of the thousands of Roman coins which have been and are still being found in England. By far the greater number of coins that circulated in Roman Britain were struck in continental mints for none were issued on the island until the third century. Several coins in this collection refer to Roman conquests in Britain. Hadrian's victories in 120 A.D. gave rise to the type which appears not only on his own coins but on some of those of his successors in which Britannia is seated, holding a spear, javelin, or standard. This figure, which is probably the prototype of the Britannia introduced by Charles II on English coins, appears on a middle bronze of Antoninus Pius in the Toronto collection.[4] Several denarii of Septimius Severus with the figure of a victory and the inscription VICTORIAE BRIT. boast of his Caledonian victories.[5]

The first Roman mints in Britain were established probably during the reign of the usurper Carausius, 287–293 A.D., at Londinium, Camulodunum, and probably elsewhere also, and they seem to have been extraordinarily active during his reign and that of his successor Allectus. The collection in the Royal Ontario Museum contains a number of bronze coins which were issued at the London mint as the inscriptions, L., M. L., M. LN. (*moneta Londinensis*), P. LN., and

[1] Accession No. GB. 49, height, 4 in.
[2] Accession No. GB. 181, height, 3 in.
[3] *A Guide to the Antiquities of Roman Britain*, p. 46, fig. 48.
[4] Cohen, *Description des monnaies frappées sous l'empire romain*, II, p. 282, No. 117.
[5] Cohen, *op. cit.*, IV, p. 76, Nos. 727 and 731.

P. LON. (*pecunia Londinensis*), indicate. A few also were struck at the Colchester mint, Camulodunum, as the letter C shows.[1] The inscription P. LON., which appears on many of the coins of Constantine the Great and his successors, shows that in the fourth century the London mint was still important. It is probable that the other mints ceased with Allectus. Space does not permit a detailed description of the coins in the Toronto collection. Suffice it to say that they range from Trajan to Constantine II. A very popular figure on the later coins is the Genius of the Roman People.

The remains of many villas in the south of England tell us much of the comfort and conveniences of the Romano-British house. The climate made windows a necessity, and there is no doubt that glass was used for this purpose as fragments of window-glass have been found on many Roman sites in Britain. The Toronto collection includes a piece from the villa at Folkestone and another from the Roman station at Alfoldean. Transparent windows called *specularia* seem to have been found even in Italy.[2] Blümner thinks, however, that the material used was the so-called *lapis specularis*,[3] and yet, the excavations at Herculaneum and Pompeii show that thick window-glass was used in the baths.[4]

Romano-British window-glass is of a bluish green color, translucent rather than transparent, and rarely less than one eighth of an inch in thickness. It was apparently rolled in moulds, as one side produced by contact with the mould is dull and rough like ground glass, while the other is smooth and bright. Mr. Thomas May discovered at Wilderspool workshops and ovens, which he thinks were used for the manufacture of glass in Roman days.[5] He found, also, a stone slab, 12 x 8 in., with a shallow recess, which he considers a mould for window-glass. Most of the fragments which are extant are small but there is a piece, 10¼ x 6½ in., in the Reading Museum. More wonderful still, in the same museum, is a piece of blown window-glass from Silchester, probably the only piece of Romano-British blown window-glass ever found. The use of window-glass in Roman Britain is an illustration of the caprice of history, for after Roman days, one must wait until the twelfth or thirteenth century to find window-glass in England again. Even then, it appears only as a rarity in kings' palaces and church windows. The collection contains, also, several beautiful bottles and bowls of blown glass, probably imported.

[1] Sir Charles Oman suggests, however, *Num. Chron.*, 1924, parts I and II, p. 64, that C may stand for the mint at Corinium instead of Camulodunum.

[2] Seneca, *Dial.* I, 4, 9; *Nat. Quaest.* IV, 13, 7; *Ep.* 90, 25; Pliny, *Ep.* II, 17, 4; Digg. XXXIII, 7, 12, 16 and 25.

[3] *Die römischen Privataltertümer*, Müller's *Handbuch* IV, 2,2, p. 103.

[4] Mau-Kelsey, *Pompeii*, pp. 273 and 351.

[5] Ward, *The Roman Era in Britain*, p. 184; May, *Warrington's Roman Remains*, pp. 37 and 82.

Artificial lighting was also needed in Britain, especially during the dull days and long nights of winter; for this purpose wax candles and oil lamps were used. Olive oil must, however, have been a somewhat costly importation for a people who were not wealthy and home-made candles and candlesticks were probably often used. Many pottery candlesticks of local manufacture were found at Silchester and the Royal Ontario Museum has one from London (Fig. 1), of coarse clay of a greyish color.[1] There is a similar candlestick in the London Museum, A24451. More interesting still is a wax candle of the Roman period in the same museum, A25707, which was found at the bottom of a cesspit in London.

Lamps, though not extremely numerous, have been found on many Romano-British sites. The commonest material was terracotta. Most of the decorated lamps were probably imported from Italy or other Mediterranean lands. There are in the Toronto collection, two terracotta lamps, GB. 47 and 48, and part of a third, GB. 46, which shows the bust of Zeus. In front of him is an eagle with wings spread, standing on a thunderbolt.[2] Deubner associates this type with the apotheosis of Antoninus Pius.[3] However, although it is popular on lamps of the second century, it is found, as here, on lamps of the first century also. GB. 47 belongs to a small but distinct class of lamps of the first century A.D., often found north of the Alps and especially in Britain.[4] It was found in the City of London and is of red clay with a red slip and has a long nozzle. In a sunken centre on the top is a comic mask and on the rim are two small knobs. The form is probably copied from bronze and the projecting knobs may be vestigial remains of the pierced projections on bronze lamps for attaching chains. Round the centre runs a raised rim from which a shallow groove passes to the nozzle. On the bottom of lamps of this type are the names of their makers in raised letters impressed from the mould. Our example bears the name "Fortis," a potter of Mutina in Gallia Cispadana, whose lamps have a wide distribution.[5] A third pottery lamp in the collection, GB. 48, was found in Cannon St., London, and dates also from the first century A.D.

In addition to the terracotta lamps the collection contains three

[1] Accession No. GB. 12, height, 1⅝ in.

[2] For similar design cf. Walters, *Catalogue of Greek and Roman Lamps in the British Museum*, Nos. 629, 630, 751, 804, 824, 825, 942, 1046 to 1049, and 1357; Baur, *Catalogue of the Stoddard Collection of Greek and Italian Vases*, No. 616; Cagnat et Chapot, *Manuel d'archéologie romaine*, tome I, p. 683, fig. 357; Loeschke, *Beschreibung römischer Altertümer*, gesammelt von C. A. Niessen, dritte Bearbeitung, I, pl. LXXXIII, 1876; and the Colchester Castle and Corporation Museum, No. 333.

[3] *Röm. Mitt.*, XXVII, 1912, pp. 5f., fig. 1–2.

[4] Walters, *Catalogue of Lamps in the British Museum*, Introduction, XXIV, fig. D and Nos. 920–936.

[5] Walters, *History of Ancient Pottery*, II, 423 ff.

bronze lamps, GB. 64, 65, and 66, which are said to have been found at Winchester. Two of these are hanging lamps, one a very fine specimen with two nozzles, a crescent handle, and chains for suspension. Bronze lamps in Roman Britain were rare, as most of the metal lamps or lampholders which have been found are iron.

To the heating system in use in the Romano-British house, two remarkably fine flue-tiles, bear witness. They remind us that the Romans had an efficient method of furnace or hypocaustic heating nearly two thousand years ago. In Italy where the weather was mild the bedrooms and the living rooms in private houses were usually warmed by braziers[1] and the hypocaust was used only for heating the hot rooms of the bath. In the damp climate of Britain, however, braziers did not produce sufficient heat for comfort, and fireplaces, which are so common in the English house today, although not unknown in Roman days, were seldom found.[2] Therefore the practical Romans, with their usual adaptability, applied the principle of the hypocaust, not only to the baths, but also to warming the winter apartments of their villas in Britain.

The hypocaust is said to have been invented for heating the baths by a certain Sergius Orata,[3] who devised, about the beginning of the first century B.C., what were called in his day *balneae pensiles*. Vitruvius describes the structure of the hypocaust in detail.[4] There were several types, the "pillared," the "channelled," and the "composite," all of which have been found in Roman Britain. The pillared may be described briefly, somewhat as follows. On a floor of concrete, rows of *pilae*, about two feet high, were built at intervals to support the "hanging floor" of the room which was to be warmed. This was constructed of courses of tiles covered with a stratum of *opus signinum* in the upper layer of which tesserae were imbedded to form a mosaic design. Into the pillared space hot air passed from the furnace and heated the floor of the room above. As this became warm the temperature of the room was raised.

The improved method was, no doubt, a great success but it was not long restricted to heating floors. As early as the Republican period the hollow heating space was extended to the walls also. Box-tiles called *tubi* or *tubuli* which communicated with the hypocaust were buried in the stucco-covered wall, at intervals, so that the sides of the room, also, might radiate heat. Walls with flue-tiles in them were called *tubulatus*.[5] If a very high degree of heat

[1] Cf. however Pliny, *Ep.* II, 17, 9 and 23.

[2] Fireplaces have been discovered, however, at Silchester, in the villa at Bignor, and in the villa at Brislington, Somerset, cf. *Archaeologia*, XVIII, p. 213; LV, p. 240; LVIII, pp. 20 and 26; and *Archaeological Journal*, XIII, p. 329.

[3] Valerius Maximus, IX, 1, 1; Pliny, *Nat. Hist.*, IX, 168; XXVI, 16; Macrobius, III, 15, 3.

[4] V, 10, 2.

[5] Pliny, *Ep.* II, 17, 9.

was required, as in the *caldarium* of a bath, one or more of the walls of a room was completely lined with flue-tiles set side by side. Openings in the sides of each of the tiles permitted hot air to circulate freely from flue to flue throughout the whole lining. This lining was fastened to the wall by a coat of mortar and the whole tiled surface was covered with a stucco on which frescoes were painted.

Remains of box flue-tiles have been found on many sites in Roman Britain. They are hollow parallelopipeds made of a coarse red brick clay so often seen in Roman roof-tiles and drainage pipes, and they are usually about 16 x 6 x 6 in., and are one inch thick. The faces of these tiles are scored or scratched with a pattern, usually a simple design, a wave pattern, lozenges, rosettes, or chevrons. A more elaborate floral decoration is found on a flue-tile in the Guildhall Museum,[1] and another from Plaxtol in Kent bears the local maker's name.[2] The design was not intended to be ornamental; its purpose was to key the mortar, which may be seen still adhering to the Guildhall and other examples.

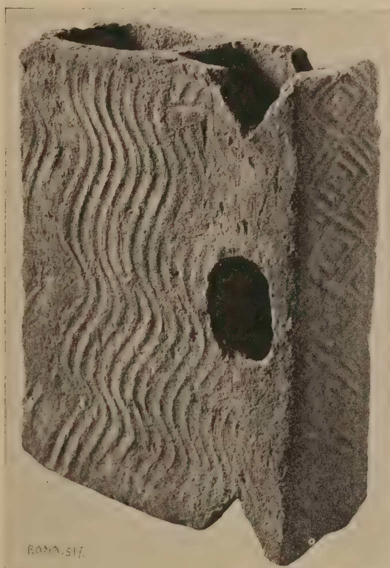

Figure 7. Terracotta Flue-Tile from Eastbourne: Toronto

The two excellent flue-tiles in the Royal Ontario Museum were found at Eastbourne, Sussex, when excavations were made for building the Queen Hotel and were presented to the Museum by Thomas Sutton, Esq. One, GB. 52, has been broken, but the other, GB. 137, is a perfect specimen of a double box-tile (Fig. 7). They are made of the usual coarse red clay and the complete specimen is 18 x 13 x 5½ in., and one inch in thickness. A wave pattern is moulded on the two broad sides and a diamond design on the narrower ends. About half way up each of the wavy sides is a somewhat elliptical opening (4¼ in. high by 3¼ in. wide). These holes show that the tile was a part of a complete wall lining through which hot air circulated. It, therefore, was probably used for heating a bath. This kind of opening is quite common, but the triangular cuts at the top and bottom are, so far as I know, rare. It may be that projections from other

[1] *Catalogue of the Collection of London Antiquities in the Guildhall Museum*, pl. XI, 4.
[2] *C.I.L.* VII, 1238.

tiles fitted into these and so held the wall lining more firmly together, or they may have been additional openings for the circulation of hot air. These tiles probably belong to the second century A.D. Single flue-tiles are common enough, but double flue-tiles are unusual. Did they form a partition wall between two rooms?

Flue-tiles are said to have been moulded by hand round blocks of wood, less frequently within wooden frames. The tiles in Toronto were apparently moulded in a wooden frame whose inner dimensions were the same as the outer dimensions of the tiles, and whose inner sides contained the designs on the faces of the tiles. In this frame two blocks were placed for the vertical spaces in the tiles. When the clay was in leather-hard condition the frame was removed and the elliptical and triangular openings were cut in the tile.

One is inclined to think that the Romano-British method of heating was more effective than that in the average English house of the twentieth century. In this connection, it is interesting to note that it is said that the Roman method, of heating the floor, is being used again in the Liverpool Cathedral, and that it is being tried out in certain schools in Derbyshire. Certainly it has the advantage of allowing the use of marble or stone flooring without causing cold feet. Evidently there are even some practical things which the moderns may learn from the ancients.

FIGURE 8. FLOOR MOSAIC: TORONTO

The more important rooms of Roman villas were paved with mosaics made of tesserae of one or of several colors.[1] The mosaics in Britain were usually of local stones and did not on the whole reach a high level, as compared with those in Italy. The Toronto collection has two modest examples made of tesserae, measuring from ½ in. to 1 in., which are red, dark grey, and white, made of marble of two colors, and of red tile. One, GB. 177, is 31 inches square and contains a rosette in a square (Fig. 8). The other, GB. 178, is 28 inches square and has a conventionalized design of a flower with pointed petals.[2] These may have formed units or parts of larger floor patterns.

[1] Ward, *Romano-British Buildings and Earthworks*, pp. 287 ff.

[2] For somewhat similar but more elaborate designs cf. Ward, *Romano-British Buildings and Earthworks*, fig. 94.

Several pieces of red brick roof-tile from the Folkestone villa illustrate the method of roofing the Romano-British house.

Two pieces of interesting relief sculpture were acquired in 1924. Both are of a local oolitic stone and were evidently executed in Britain. The larger and better preserved of the two (Fig. 9), apparently an altar erected to a divinity, is in rather high relief and shows a standing figure, with high headdress, draped below the waist, and wearing boots that reach half way to the knees.[1] The figure holds in its left hand what may be a crude cornucopia, although the worn condition of the stone makes interpretation uncertain. Its right arm is extended towards what may be a small altar on the ground beside the figure. At the very top of the stone there is a circular plinth with shallow depression for receiving a libation or offering, which shows that the stone was an altar.

FIGURE 9. ALTAR TO THE GENIUS OF THE ROMAN PEOPLE: TORONTO

Whom does the figure represent? Judging by its similarity to one which frequently appears on Romano-British coins, bearing the inscription GENIO POP. ROM. (Fig. 10), it may be the Genius of the Roman People and the altar may be dedicated to that genius. There is the same high headdress, high boots, and drapery below the waist only. The genius on the coins has a cornucopia in its left hand and a patera in its right; the figure on the stone may also have a patera in its right hand.[2]

The idea of the genius was very popular from an early time. The earliest form was that of a man's personal genius, but the conception was soon extended to the *genius loci*, and every spot, town or country, street or bath, was deemed to have its own peculiar genius or guiding spirit. Finally there was the genius of the state or the *genius populi Romani*.[3] In Republican days a statue of this genius, represented as a bearded man holding a cornucopia and sceptre, stood in the Forum, near the Temple of Concord. There are several appearances of this genius on Republican coins.[4] He is sculptured

[1] Accession No. GB. 179, height, 45 in., width, 18½ in., thickness, 10½ in.

[2] A somewhat similar figure appears on a stone, probably erected to the genius of the *praetorium*, Collingwood Bruce, *The Roman Wall*, p. 348; cf. also, another to the genius of the camp, p. 358.

[3] Livy, XXI, 62, 9; Plut., *Quaest. Rom.* 62; Dio Cass., XLVII, 2, and L, 8; *C.I.L.* II, 2522.

[4] Babelon, *Monnaies de la république romaine*, I, pp. 401, 402, 417, and 419.

also on the Arch of Titus,[1] and pictured on Imperial coins.[2] Under the empire he is a youth, draped below the waist, with high head-dress, frequently holding a patera in his right hand and a cornucopia in his left. He is found on coins of Vespasian, Titus, Septimius Severus, and becomes a very popular type indeed on the middle bronzes of Diocletian, Maximianus Herculeus, Constantius Chlorus, Galerius, Maximinus II, Licinius the Elder, and Constantine the Great.

Under the empire the cult of the genius was very popular in all parts of the Roman world. Dedications to the genius of a place are quite common in Roman Britain, but space does not permit one to cite examples. At Whitby Castle in Northumberland, an altar was dedicated by the Nervii to the genius of Rome, *genio Romae.* A tablet found at Stanwix with the inscription LEG.VI. / VIC.P.F. G. P. R. F. was apparently erected by the sixth legion, the victorious, pious, and faithful, to the Genius of the Roman People. There is another altar to this genius at High Rochester. It seems probable then from the resemblance of the figure on the altar to those on the coins and from the fact that dedications to a genius, even to the Genius of the Roman People, were usual in Britain, that we have in the piece of sculpture in Toronto an altar erected to that genius. Abundantia and Fortuna are also represented with cornucopia and patera, but the figure on the altar is male. Another possibility is *Bonus Eventus*, who is somewhat similarly represented, but on the whole it seems probable that we have here the Genius of the Roman People.

Figure 10. Coin of Maximianus showing the Genius of the Roman People: Toronto

The second stone[3] is in lower relief, very badly weathered and worn, and therefore, difficult to interpret. One can distinguish a standing draped figure, with the drapery apparently drawn up over the head. The left hand may hold a cornucopia.[4] The stone is not definitely the form of an altar as there is no flat space on top to receive an offering. It is somewhat in the shape of a stele and it may, therefore, be a memorial stone.

The Museum is greatly indebted to the Folkestone Corporation

[1] Mrs. Strong, *Roman Sculpture*, p. 109.

[2] Cohen, *Description des monnaies frappées sous l'empire romain*, I, p. 382, No. 200 and elsewhere.

[3] Accession No. GB. 180, height, 42 in., width, $14\frac{1}{4}$ in., thickness, 9 in.

[4] The figure resembles closely that of a genius between the Lares which is shown in Daremberg and Saglio, *Dictionnaire des antiquités grecques et romaines*, fig. 3542.

and to Mr. S. E. Winbolt for an interesting case of objects from the Folkestone villa which was excavated by Mr. Winbolt in 1924; to the latter also for the gift of fragments of pottery and other objects from the Roman station at Alfoldean; to Thomas Sutton, Esq., and to the Commissioner of Works of Richborough for fragments of pottery from that site; and to Mr. A. G. Wright of the Colchester Castle and Corporation Museum and Mr. George F. Lawrence of the London Museum for very kind coöperation and advice.

Cornelia G. Harcum

The Royal Ontario Museum of Archaeology
Toronto, Canada

Archaeological
Institute
of America

THE REASSESSMENT OF TRIBUTE IN 438/7

At some time between 439/8 and 436/5 there was a reassessment of tribute in the Athenian Empire.[1] The evidence for that reassessment is threefold. In the first place, there are amounts of tithe recorded in *I.G.* I², 209 and 210 which differ from the amounts recorded for the same cities in *I.G.* I², 202, 203, 204, and 205; secondly, there are differences in the spelling of names between *I.G.* I², 209 and 210 and *I.G.* I², 202, 203, 204, and 205; and finally, the cities on the quota lists are grouped into four geographical districts which follow each other in the order of Ionic, Island, Hellespontine, and Thracian in *I.G.* I², 209 and 210 instead of into five geographical districts which follow each other in the order of Ionic, Hellespontine, Thracian, Carian, and Island in *I.G.* I², 202, 203, 204, and 205. In the later period the Carian and Ionic names were united into one group, and the combined list appeared under the heading Ἰωνικὸς Φόρος.

The evidence for the reassessment of tribute from change of tithe is remarkably clear when one considers the fragmentary nature of the inscriptions representing the years from 439 to 435. There are no figures at all preserved for the Ionic or Island lists, and there are only nine names with records of tithe preserved in *I.G.* I², 210 from which to judge of changes in tithe for the Hellespontine list. From these nine items, however, it is possible to determine:

(1) The tithe of Ἀρτακηνοί (ΔΔΔ├├├II) did not change.

(2) The tithe of Παριανοί changed from ΔΔΔ├├├II (*I.G.* I², 203, 205) to H (*I.G.* I², 210).

(3) The tithe of Μαδύτιοι changed from Γ├├├II (*I.G.* I², 203, 204) to [ΔΔ]Δ├├├II (*I.G.* I², 210).

(4) The tithe of Λιμναῖοι (Γ├├├II) did not change.

(5) The tithe of Σήστιοι changed from Γ├├├II (*I.G.* I², 203, 204) to [ΔΓ├]IIII (*I.G.* I², 210).

(6) The tithe of Ἀλωπεκοννήσιοι ([ΔΔΔ├]├├II) may or may not have changed. There is no evidence for the fourth period (*I.G.* I², 202, 203, 204, 205).

(7) The tithe of Χερρονησῖται ἀπ' Ἀγορᾶς (H) did not change.

[1] The dates of reassessments in 450/49, 446/5, and 443/2 have already been determined. *Cf.* Koehler, Urkunden und Untersuchungen zur Geschichte des delisch-attischen Bundes, *Abh. der Ber. Akad.*, 1869, pp. 134 and 148, and others. For the reassessment in 443/2 *cf.* Dahms, *De Atheniensium sociorum tributis quaestiones septem*, diss. Ber., 1904, pp. 35–37 and also Meritt, Tribute Assessments in the Athenian Empire from 454 to 440 B.C., *A.J.A.*, XXIX (1925), pp. 247–273. The assessment periods will be called for the sake of convenience first, second, third, etc., as follows: first (454/3–451/0), second (450/49–447/6), third (446/5–444/3), fourth (443/2– 439/8), fifth (438/7– 435/4).

(8) The tithe of 'Ελαιούσιοι (𐅅) did not change.

(9) The tithe of Σηλυμβριανοί changed from 𐅃 (*I.G.* I², 203, 204) to Δ𐅃 (*I.G.* I², 210).

Of the nine cities, then, where the record of tithe has been preserved, four and possibly a fifth show a change in the amount of tribute paid.

Evidence for the Thracian district is more nearly complete, and it is possible to compare *I.G.* I², 202, 203, 204, and 205 with both *I.G.* I², 209 and 210. The following changes appear:

(1) The tithe of Αἰγάντιοι changed from ΔΔΔ⊢⊢⊢II (*I.G.* I², 202) to 𐅅 (*I.G.* I², 209).

(2) The tithe of Αἴνιοι changed from X (*I.G.* I², 202, 205) to HHHH (*I.G.* I², 209). The name does not appear in *I.G.* I², 210.

(3) The tithe of 'Αφυταῖοι was H in *I.G.* I², 202. It is impossible to say whether the amount to be restored in *I.G.* I², 210 was H or HHH.

(4) The tithe of Μαρωνειῆς changed from H𐅅 (*I.G.* I², 202) to X (*I.G.* I², 209 and 210).

(5) The tithe of Μηκυβερναῖοι changed from 𐅅Δ𐅃⊢IIII (*I.G.* I², 202) to H (*I.G.* I², 210).

(6) The record of Μενδαῖοι was irregular in the fourth period, with the tithes of 𐅆HHH in *I.G.* I², 202 and 𐅆 in *I.G.* I², 205. The tithe 𐅆HHH of *I.G.* I², 209 and 210 may or may not be a change.

(7) The tithe of Σαμοθρᾳκες probably did not change. The amount is given as 𐅆H both in *I.G.* I², 202 and 210, and the amount HHHH of *I.G.* I², 205 represents, therefore, an incomplete payment.

(8) The tithe of Σερμυλιῆς changed from 𐅆 (*I.G.* I², 202) to HHHH𐅅 (*I.G.* I², 210). The reading Σερμυ]λι[ῆς in *I.G.* I², 208 is very doubtful. The preserved letters ⊬I might belong either to the name Φαρβήλιοι or Χεδρώλιοι. But *cf.* Fimmen, Die Attischen Tributquotenlisten, *Ath. Mitt.*, XXXVIII (1913), p. 232, note 1 on the readings of *I.G.* I², 208. (*I.G.* I,255). *Cf.* also p. 295 below.

(9) The tithe of Σίγγιοι changed from HH (*I.G.* I², 202, 203) to HHH (*I.G.* I², 210).

Other names of the Thracian list show changes in *I.G.* I, 209 and 210 even where the records of payment in the fourth period, or even in the fourth and third periods, have not been preserved. It is impossible to say with certainty whether these changes occurred at the time of the reassessment between 439 and 436, but it is quite probable that such was the case, especially for those cities whose records show amounts of tithe in *I.G.* I², 209 and 210 different from the amounts of tithe recorded for them in the third assessment period. There were relatively so few changes in tithe between the third and

fourth assessment periods,[1] that the variations which appear in *I.G.* I², 209 and 210, as different from the recorded amounts of the third period (when evidence from the fourth period is lacking) are probably to be ascribed to the reassessment of tribute between 439 and 436. For example:

(1) The tithe of Ἀσσηρῖται was ΔΔΔΔ in the third period (*I.G.* I², 199). It appears as 𐅄 in *I.G.* I², 210.

(2) The tithe of Σκαβλαῖοι was [ΔΔΔ]⊢⊢⊢ΙΙ in the third period (*I.G.* I², 199). It appears as 𐅄 in *I.G.* I², 209 and as ΔΔΔ⊢⊢⊢ΙΙ in *I.G.* I², 210. But the record of this city is otherwise irregular in *I.G.* I², 209, 210, 211, and 212.

(3) The tithe of Σκιωναῖοι was 𐅅Η in the third period (*I.G.* I², 199, 200, and 201). It appears as Χ𐅅 in *I.G.* I², 210.

The evidence from the difference in spelling of names for the reassessment between 439 and 436/5 may be summarized as follows:

(1) Διῆς ἀπὸ τοῦ Ἄθω in *I.G.* I², 202, 203, 204, and 205 appears as Διῆς ἐκ τοῦ Ἄθω in *I.G.* I², 209 and 210.

(2) Μαρωνειῆς in *I.G.* I², 202, 203, and (204)[2] appears as Μαρωνῖται in *I.G.* I², 209 and 210.

(3) Πρίαπος in *I.G.* I², 203, 204, and 205 appears as Πριαπῆς in *I.G.* I², 210.

(4) The records of the Eretrian colony Dicaea, and of the Mendaean and Thracian cities Neapolis show variations of spelling which cannot be explained merely by the publication of a reassessment decree between 439/8 and 436/5.

The third item of evidence for a reassessment of tribute between 439/8 and 436/5 is that at some time during these years the old grouping of the cities on the quota lists into five geographical divisions was abandoned in favor of the grouping into four geographical divisions, with the order changed, and with the Carian and Ionic lists combined into one.

Koehler noticed this change in the quota lists and on the basis of it proposed that there had been a reassessment of tribute in 437/6, even though he was not willing to use the original grouping of the cities into five districts in 443/2 as evidence for a new assessment of tribute in that year.[3] Since the fact of a reassessment in 443/2 has been determined,[4] it is clear that the original grouping of the cities into five geographical districts was instituted by the reassessment decree of that year, and it is equally clear that the change from five districts to four is evidence for a reassessment of tribute between 439/8 and 436/5.

[1] Dahms, *De Atheniensium sociorum tributis quaestiones septem*, diss. Ber., 1904, pp. 35–37.
[2] *Cf.* Meritt, *supra*, p. 268.
[3] Koehler, *op. cit.*, p. 134.
[4] Meritt, *supra*, p. 252.

This observation is important, because if it is possible to determine the date of the change from five to four geographical districts it is possible to determine the exact year of the reassessment.

That Fimmen's reconstruction of the second stele in the Epigraphical Museum at Athens was not entirely correct has been amply demonstrated by West.[1] In particular, *I.G.* I², 208, assigned by Fimmen to the year 437/6 has been shown by West to belong to the year 438/7. And in spite of Fimmen's expressed doubt as to the readings of the Corpus in *I.G.* I², 208,[2] I see no reason to reject Koehler's statement that the right-hand column, toward the margin of the stone, preserved traces of the Thracian list.[3] For example, I should regard Koehler's readings Ἴκιοι and [Σκ]αβλαῖοι as certain, however much doubt there may be about the other fragmentary names and the amounts of tithe preserved before them. Now, Thracian names could appear in the last column only after the sequence of four geographical divisions on the quota lists had taken the place of the earlier five, for in the earlier period the Thracian list came in the center of the stone. We have, therefore, in *I.G.* I², 208 a *terminus ante quem* for the reassessment of tribute. It occurred at least as early as 438/7.

The small fragment *I.G.* I², 208a helps in determining more closely the date of the reassessment. Fimmen has shown that the so-called second stele was cut through vertically in post-Classical times into nearly equal halves, and that the cut surfaces were then given a marginal dressing. This same late marginal dressing appears on the right edge of *I.G.* I², 208a and makes possible its identification as a fragment of the second stele. Fimmen (*op. cit.* p. 237) dates it either in 439/8, 438/7, or 437/6. It could have come only from near the center of one of the broad surfaces (obverse or reverse) where the stone was cut through, and since the names preserved on it are Thracian names, it may be placed definitely in the year 439/8. From 438/7 on, the Thracian names were listed last, and could not have appeared on any fragment from the center of the stele.

The only possible list, therefore, to which *I.G.* I², 208a may be assigned is the first list of the obverse of the stele, and the presence of Thracian names there, in the center of the broad face of the stone, shows that in 439/8 the old order of five geographical divisions was still being followed. The change from the grouping of the cities in five districts to the grouping of the cities in four districts must have come between 439/8 and 438/7, and the reassessment of tribute on which that change depended may be definitely dated in 438/7.

[1] The Place of *I.G.* I, 256 in the *Lapis Secundus*, *A.J.A.*, XXIX, pp. 180–187. Fimmen, Die Attischen Tributquotenlisten, *Ath. Mitt.*, XXXVIII (1913), pp. 231–238.

[2] Fimmen says, *op. cit.*, p. 232, note 1, "Auf der anderen Breitseite, auf der Köhler ein paar Worte gelesen haben will (*I.G.* I, 255), kann ich auch nur vereinzelte Buchstaben erkennen. . . ."

[3] See note on *I.G.* I, 255 in the Corpus.

There was, consequently, no reassessment of tribute in 439/8, as has been generally supposed,[1] and the inscription *I.G.* I^2, 206 belongs in the same assessment period with *I.G.* I^2, 202, 203, 204, and 205. The length of the fourth period was five years, extending from 443/2 to 439/8 inclusive, and the reassessment came in 438/7, a Panathenaic year.

The fact that *I.G.* I^2, 206 belongs to the fourth assessment period has important bearing on the restoration of the names preserved in that inscription. The Ionic and Carian lists were still separate and the names which appear in *I.G.* I^2, 206 can only be restored as Ionic names. Carian names would have appeared only after intervening columns of Hellespontine and Thracian names. For example, the ’Ξ of line 8 (as the transcript is given in the Corpus) can only be restored as Γαργα]ρῆ[ς, and the names immediately below it must represent some sequence of double entries, perhaps with the *ἐπιφορά*.

I.G. I^2, 211a may also be assigned to the year 439/8, to form part of the same inscription with *I.G.* I^2, 206 and 208a. The Corpus has rightly recognized the fact that the numerals preserved on this fragment represent amounts of tithe recorded for the Hellespontine district, and the names Περίνθιοι, Κυζικηνοί, and Ἁρπαγιανοί have been restored as certain in lines 2, 4, and 7. On the fragment are also preserved letters from the ends of Ionic names, and the Corpus has restored in lines 2, 6, and 7 [Θερμαῖοι ἐξ Ἰκάρ]ου, [Μυριναῖοι παρὰ Κύ]μην, and [Μυριναῖοι ἐπιφορ]ᾶς. Fimmen has identified the inscription as a fragment from the second stele on the grounds of style of writing, but he was unable to place it in any definite year. Now the fact that we have a column with Ionic names, followed immediately by Hellespontine names makes it seem highly probable that the inscription belongs to 439/8, when the old order of five geographical districts was still in force. It might have been possible, with a long column, and a short Island list, to have Ionic and Hellespontine names appear in consecutive columns even after the lists had been arranged in the order of Ionic, Island, Hellespontine, and Thracian, but the probability is slight for such a correspondence of 11 lines as that represented by *I.G.* I^2, 211a. The probability of the earlier date is made a certainty by the appearance of the tithe 𐅅 in line 8 of *I.G.* I^2, 211a. The only Hellespontine name which can be restored after this tithe is Σηλυμβριανοί, and in the later period the tithe of Σηλυμβριανοί has been lowered to Δ𐅃 (see p. 293, *supra*).[2]

I.G. I^2, 211a is, then, definitely dated in the year 439/8, and should in all probability be joined with *I.G.* I^2, 206. In line 9 of *I.G.* I^2, 206 is a mark of punctuation and the initial *pi* of παρὰ Κύμην, which is continued in line 6 of *I.G.* I^2, 211a. In line 14 of

[1] By those who have followed Kirchnoff's dating of the stones, placing *I.G.* I^2, 209 in 439/8.

[2] I am indebted to Dr. Allen West for this observation.

I.G. I², 206 the restoration παρ[ὰ] Μυσία[ν] cannot be correct because there is preserved after the final *alpha* on the stone not a *nu* but a mark of punctuation. The name in line 14 was probably the same as that in line 13, except that line 14 recorded a payment of ἐπιφορά. If line 9 of *I.G.* I², 206 is to be placed in continuation with line 6 of *I.G.* I², 211a, it will be noticed that the word [ἐπιφο]ρᾶς of line 11 in 211a falls in line with [– – –]αμυσία: of 206. In the Hellespontine column of 211a, line 1 may be restored with certainty as 𐅅Η[ΗΗΗ Χαλχηδόνιοι, provided the name Κυζικηνοί is placed in line 4.[1] There are in the Hellespontine list for the fourth period only three cities with amounts of tithe beginning in 𐅅. Σηλυμβριανοί has already been placed definitely in line 8 after the tithe 𐅅. The tithe of line 1 must be restored to read 𐅅Η[ΗΗΗ] and in lines 1 and 4 there appear the names Χαλχηδόνιοι and Κυζικηνοί, although it is impossible to say in which order. In line 5 the only possible restorations are Νεάνδρεια and Παριανοί.

The following restoration is suggested for the combined inscription:

Αἰρ]αιῆς		
Κλαζ]ομέν[ιοι]		
Τήι]οι		
Ἐλα]ιέα ⁝ παρ[ὰ Μύριναν]	𐅅Η[ΗΗΗ]	[Χαλχηδόνιοι]
Οἰναῖ]οι ⁝ [ἐ]χ[ς Ἰκάρ]ου:	Χ	[Περίνθιοι]
Κυμαῖ]ο[ι]	Δ𐅃├ΙΙΙΙ	
Κυμαῖοι ἐπιφορ]ᾶς	𐅃ΗΗΗΗ	[Κυζικηνοί]
Γαργα]ρῆ[ς]	ΔΔΔ├├├ΙΙ	
Μυριναῖοι] : π[αρὰ Κύ]μην	Δ𐅃├ΙΙΙΙ	
Μυριναῖοι] : ἐ[πιφορ]ᾶς	𐅃	[Ἁρπαγιανοί]
Πιταναῖ]ο[ι]	𐅅	[Σηλυμβριανοί]
Πιταναῖο]ι : ἐπ[ιφ]ορᾶς	Η	
– – – αμ]υσ[ία]	Δ𐅃├ΙΙΙΙ	
– – – αμυσία : [ἐπι]φορᾶς	𐅃	
– – – οι		

and at the end of Col. 1

Ἐρυ[θραῖοι]
Πολιχ[νῖται]

The various inscriptions belonging to the second stele may now be arranged in the following chronological order:[2]

[1] Dahms, *op. cit.*, p. 79 restores 𐅅Η[Καλχηδόνιοι], but the tithe of Chalcedon in the fourth period was 𐅅ΗΗΗΗ. *Cf. I.G.* I², 203, 204, 205. Dahms' restoration has been adopted, with reservation, in the Corpus.

[2] I have not attempted in this paper to place the small fragments *I.G.* I², 212a and 212b, which apparently belong to this stele. (*Cf.* Fimmen, *op. cit.*, p. 237.)

439/8 *I.G.* I^2, 206+208a+211a
438/7 *I.G.* I^2, 207+208
437/6 *I.G.* I^2, 207 (part of fragment 11 marked in the old Corpus, Vol. I, p. 128 as *nunc muro immissa*)
436/5 *I.G.* I^2, 209
435/4 *I.G.* I^2, 210+*Ath. Mitt.*, XXXVIII (1913), p. 232. *Cf.* West, *op. cit.*, p. 186.
434/3 *I.G.* I^2, 211; but the fragment taken from Fimmen, *Ath. Mitt.*, XXXVIII (1913), p. 232 belongs with the preceding year.
433/2 *I.G.* I^2, 212
432/1 *I.G.* I^2, 213.

Benjamin D. Meritt

Princeton University

Archaeological
Institute
of America

THE MOTHER OF THE LARES

THE worship of the Mother of the Lares is known in inscriptions only from the Acts of the Arval Brethren. Here in a number of expiatory sacrifices performed before the temple of Dea Dia in the grove of the Arvales on the Via Campana the Mother of the Lares and her children the Lares are mentioned among the divinities to whom sacrificial victims are offered. The former received two sheep, the latter two withers. The importance of the Mother of the Lares in the ritual of the Arval Brethren was not fully realized until a new fragment of the Acta was found in 1914. Portions of the Acta already known prescribed that the brothers, after a complicated and obviously very ancient ritual, were to offer prayers to vessels of sun baked clay filled with *puls* (the meal porridge which was the primitive food of the Romans), then open the doors of the temple of Dea Dia and hurl the jars down the slope that led to the temple.[1] The recently discovered fragments contain the important statement that the jars hurled from the door were a dinner for the Mother of the Lares (*cena matri Larum*).[2] Soon after this ceremony the children of the goddess to whom the dinner was thrown are called upon by the brothers in the ancient song beginning *enos Lases iuvate.*

Before the new fragment was found, the sacredness of the vessels, themselves an object of cult, and the ceremony of hurling them down the slope had been recognized by Eitrem as characteristic of the ritual of the gods of the underworld.[3] He compared the χύτροι, the third day of the Attic Anthesteria, an ancient festival of Dionysus. The day took its name supposedly from the χύτραι earthen pots in which offerings were made to Hermes as god of the dead. There are other striking parallels in Greek ritual. The *puls* of the Arval Brethren, as Benndorf has shown,[4] has an importance in Roman rites similar to the Greek πέλανος, a substance which was sometimes semi-liquid and sometimes in the form of a cake, made of meal, usually with an admixture of honey and poppy seed.[5] It was the regular offering to underworld divinities, mother earth and the spirits of the departed. To them the queen in the Persae (523–524) promises an offering of πέλανος.

1 Henzen, *Acta Fratrum Arvalium*, pp. 26–27; cf. Warde Fowler, *Religious Experience of the Roman People*, p. 489.

2 *Not. Scav.*, 1914, pp. 466–467; Dessau, *Inscr. Sel.* 9522.

3 Eitrem, *Hermes und die Toten*, *Christiania Videnskabs—Selskabs Forhandlinger* for 1909, no. 5, p. 57, n. 1. Against this view see Wissowa, *Hermes*, 1917, p. 341. Cf. also Stengel, *Die griechischen Kultusaltertümer* 3 (1920) p. 239.

4 Benndorf, *Wiener Eranos*, 1893, pp. 377 ff.

5 Stengel, *Opferbräuche der Griechen* (1910) ch. X. *Herzog*, *Hermes*, XXIX pp. 625 ff., compares the cakes fed to Cerberus in *Aen.* VI, 420 f.

ἔπειτα γῇ τε καὶ φθιτοῖς δωρήματα
ἥξω λαβοῦσα πέλανον ἐξ οἴκων ἐμῶν.

A mixture of wheat-meal and honey, obviously very like the πέλανος, was thrown every year to Ge Olympia through an opening in the floor of her shrine within the precinct of Olympian Zeus at Athens (Paus. I, 18, 7). The similar offering to the Mater Larum suggests at once that she was a form of the earth goddess. If she was, her children the Lares, infinitely better known than she is in ancient sources, were the spirits of the departed. This was the prevailing conception of the Lares in ancient times. In modern times, though vigorously opposed by Wissowa[1] and other eminent authorities, it has in general met with favor among students of comparative religion.[2] It was supported by the late Professor Margaret C. Waites, in an able article in this journal, one of the series of important studies that gave the writer an honored position in the field of ancient religion.[3]

FIGURE 1. ALTAR OF THE BELVEDERE—FRONT

The ritual of the Arval Brethren, in which Wissowa has found one of his strongest supports for his view of the Lares as guardians of the farmer's field, has thus provided striking evidence for placing the Lares in the realm of spirits of the departed.[4] As such, their function as beneficent spirits to whom prayer is made for the fertility of the soil has many parallels in folk-lore of other nations.[5] The Lares, Martianus Capella tells us (II, 162), are good

[1] See Wissowa, *Archiv für Religionswissenschaft*, VII, pp. 42 ff; *Religion u. Kultus der Römer*, [2] 166 ff.

[2] See Boehm's useful summary of modern discussions in the recent article Lares in Pauly-Wissowa. Wissowa's chief opponent has been Samter in *Familienfeste der Griechen und Römern* pp. 105 ff., and in *Arch. Rel.* X (1907), pp. 368 ff. His conception of the Lares, though questioned in many details, was on the whole sustained by Otto, *Archiv für lateinische Lexikographie*, XV (1906), pp. 113 ff. For further support see Ehrlich, *Kuhns Zeitschrift*, XLI (1907), pp. 298 ff.

[3] Waites, *The Nature of the Lares and their Representation in Roman Art* in *A.J.A.* XXIV (1920), pp. 241–261.

[4] Wissowa's attitude remains unchanged. See *Hermes*, 1917, p. 341.

[5] For Greek parallels see Rohde, *Psyche* [2] I, p. 247, n. 1. Cf. the evidence for ancestral spirits invoked in rain charms, cited by Frazer, *Golden Bough* [3] I, p. 285; VI, p. 188; VIII, p. 109.

ghosts and they and their mother have a natural place in the ritual of a brotherhood whose chief duties consisted in the performance of purification ceremonies destined to make the Roman fields fruitful. There are parallels in the cult of the Lares for the dinner thrown out to the Mother of the Lares. That act, which was one of the ceremonies preliminary to the banquet of the brothers, may be compared to the libations regularly poured to the Lares at Roman banquets and perhaps to the custom of offering to the Lares any food accidentally dropped at table.[1] In the folk lore of other nations the scraps under the table are regarded as the possession of the spirits of the ancestors.

Figure 2. Altar of the Belvedere—Rear

But let us return to the Mother of the Lares. All that we know of her from ancient sources accords with the idea that she was an earth goddess associated with the gods of the underworld. Her name, we are told by Varro and other scholars,[2] was Mania, a title that was naturally associated with the Manes, the most general term for the spirits of the underworld to whom the Lares belong. Mania was the name given to the woolen figures in human form that were hung up, as substitutes, we are told, for human sacrifice, on the house doors and at the cross road shrines during the festival of the Compitalia (Macrob. *Sat.* I, 7, 34–35). The word in general denoted an evil spirit, and was used, Festus tells us (p. 115 L), by nurses to frighten children. Though it does not occur in inscriptions or in literature outside the field of learned speculation,[3] it seems to have been used as a term of opprobrium like the German *des Teufels Mutter* or the

[1] Pliny, N.H. XXVIII, 27. See Samter, *Familien feste d. Griechen u. Römern*, pp. 110 ff., *Arch. Rel.* X, p. 373. Otto argues (l. c.) that the food dropped and then burned to the Lares as a *piatio* is not analogous to the scraps under the table that were dedicated to ancestors. It is natural to compare with the food thrown to the Mater Larum the black beans thrown to the *larvae* at the Lemuralia. Cf. Fornari, *B. Comm. Rom.*, 1914, pp. 317 ff.

[2] Varro, *L.L.* IX, 61; Arnobius, III, 41; Macrobius, *Sat.* I, 7, 34–35; Festus, p. 115 L.

[3] Wissowa (*s.v. Mania, Roscher*) holds that this name is an invention, either popular or learned, to explain the *maniae* hung up at the festival of the Compitalia. Against this view see Ehrlich, *Kuhns Zeitschrift*, 1907, p. 296; Otto *l.c.*

Greek μήτηρ δαιμόνων.[1] The latter, as Rohde has pointed out,[2] was apparently a name for Hecate who was worshipped with the δαίμονες at the cross roads. Like Hecate, another manifestation of Mother Earth, the Mother of the Lares, whether called Mania or not, had her part in the cult at the cross roads. According to Macrobius she shared with the Lares in their ancient festival of the Compitalia which centered about the shrines at the cross roads.

Still other names for the Mater Larum are attested in Roman legends. According to Ausonius[3] she was called Larunda and according to Ovid Lara (*Fasti*, II, 571 ff.) The latter in Ovid's story was a nymph whom Hermes was commanded to accompany *ad manes.* By him she became the mother of the Lares. Then there was Acca Larentia whose cult was celebrated by public sacrifice in the Velabrum on December 23. She is associated with the Lares by her name and by the name of her festival, the *dies Larentiae* or *Larentalia*, a celebration of the cult of the dead.[4] She is moreover associated with the family of the Junii who celebrated their ancestral cult, not as others did on the Parentalia, but on the Larentalia.[5] The Junii, through their great ancestor, the first consul M. Junius Brutus, who was said to have reformed the cult of Mania and the Lares by abolishing human sacrifice at the Compitalia, had a particular connection with the Mother of the Lares.[6] Finally Acca Larentia is associated with the same goddess by a story that made her the mother of the Arval Brethren, whose primitive rites to the mother of the Lares I have already discussed. This story made Acca Larentia, the foster mother of Romulus and Remus, identical in some versions with the wolf that suckled the twins.[7] According to a further elaboration of the same story she was the mother of twelve sons, one of whom she lost; his place was taken by Romulus who called himself and his brothers *fratres Arvales*, and instituted the later religious brotherhood.[8] Another story[9] described her as a courtesan beloved

[1] Ehrlich *l.c.* [2] Rohde, *Psyche*², II, 408.

[3] Ausonius, *Technop.* 8, 9. Larunda progenitus Lar. Larunda in Varro, *L.L.* V, 74 was one of the many Sabine divinities (the Lares are also included in the list) to whom Titus Tatius established altars at Rome.

[4] The difference in quantity of the *a* in Lăres and Lārentalia has been urged to prove that the words are unrelated. Against that view see Otto's interesting discussion, *Archiv für lat. Lex.* XV, pp. 113 ff.

[5] Plutarch, *Quaest. Rom.* 34; Cicero, *De Leg.* II, 54.

[6] Macrobius, *Sat.* I, 7, 35.

[7] Macrob. *Sat.* I, 10, 17 (quoted from Licinius Macer); Paul. Fest. p. 106 L; Aul. Gell. VII, 7, 8; Ovid, *Fasti* III, 57 ff.; Plutarch, *Rom.* 4; *Quaest. Rom.* 35.

[8] Masurius Sabinus (a jurist who lived under Tiberius) *apud* Gell. VII, 7, 8; Pliny, N.H. XVIII, 6. On the identity of Acca Larentia and the Mater Larum see Dessau's note 24 on the recently found record of the Arvales, *Inscr. Selectae*, 9522. Against the association of the two see Wissowa, *Hermes* 1917, p. 342, who suggests that Masurius Sabinus's explanation of the Arvales is learned speculation on the origin of the college that was based on knowledge of the ritual of the Arvales as reorganized by Augustus.

[9] Plutarch, *Rom.* 5; *Quaest. Rom.* 35; Tertullian, *ad Nat.* II, 10; Augustine, *De Civ. Dei* VI, 7; Macrob. *Sat.* I, 10, 11 ff.

by Hercules, a woman who subsequently married a rich Roman, inherited his wealth, and made the Roman people her heir.[1] The goddess herself, with a shrine that was reputed to be her tomb,[2] probably belongs in the realm of hero worship; about her place of burial had gathered stories that give her something of the characteristic of the earth goddess. In them she was represented either as a Κουροτρόφος type or as the mate of the fertility divinity Hercules.[3]

In an extraordinary story, quoted from Cassius Hemina,[4] an annalist of the second century B.C., the Mother of the Lares seems to be identical with the famous sow which, with her litter of thirty young, was associated variously with Lavinium, Rome, and Alba. By this version the sow produced the remarkable litter at Rome, and Romulus and Remus, in consequence of the prodigy, erected a shrine of the Lares Grundules or grunting Lares. In view of the frequent identity between god and sacrificial victim, it is worth noting that the pig was the most usual victim sacrificed to the Lares, just as the pregnant animal and particularly the pregnant sow was a common sacrifice to the earth goddess.

FIGURE 3. ALTAR OF THE BELVEDERE—SIDE

The old Italic goddess Maia, one of the manifestations of the earth divinity for whom the pregnant sow is attested as a sacrificial victim,[5] is brought closely in relation to the Mother of the Lares because she seems to have been worshipped at the cross roads. We find her represented with Mercury on an altar set up at Rome per-

[1] On these two stories see Mommsen's discussion, *Die echte und die falsche Acca Larentia, Römische Forschungen* II, pp. 1 ff. Mommsen held that the story that made Acca Larentia the nurse of Romulus and Remus, which is attested from later sources, is less worthy of consideration than the other story. See also Wissowa *s.v.* Acca Larentia Pauly-Wissowa, and *Religion und Kultus der Römer*,[2] p. 234. On reconciling the two stories in the conception of the goddess, see Otto's able article, *Wiener Studien*, 1913, pp. 62 ff. written, it is interesting to note, before the new fragment of the Acca came to light.

[2] The position of her shrine in the Velabrum is a possible place for a tomb belonging to the Palatine city. See von Duhn's discussion of tombs in the Forum, *Italische Gräberkunde*, pp. 415 ff.

[3] Similarly Hecate was worshipped with Hermes at the cross roads and the Mater Larum with Liber Pater or Genius.

[4] Cassius Hemina *ap.* Diomedes I, p. 384 K; Nonius, p. 114 M.

[5] Macrobius, *Sat.* I, 12, 20. See Carcopino, *Virgile et les Origines d'Ostie*, p. 704.

haps a century before the end of the Republic by the *magistri* of two *pagi* and a *vicus*—officers who had charge of the cult of the Lares Compitales.[1] She seems too to be a variant of Mania who, probably because of the prominence of Hermes at the cross roads in Greek cult, became identified with the Greek Maia, mother of Hermes. With Mercury she was worshipped at Delos and Pompeii by associations of freedmen who were the forerunners of the Augustales.[2]

Finally among the divinities who take the place of the Mother of the Lares one may mention Vesta, another goddess whom the ancients recognized as one of the forms of Mother Earth.[3] She was ordinarily associated with the Penates rather than with the Lares. Through the constant confusion between Lares and Penates evident in literature and in art she came to be grouped sometimes with the Lares. So we find her between two Lares of the familiar type on a painting from a Pompeian household shrine.[4] Her identity with the Mother of the Lares comes out, as we shall see, in Augustan cult.

There are other manifestations of Terra Mater and therefore other variants of the Mother of the Lares among the divinities addressed in the expiatory prayers of the Arval Brethren. Dea Dia herself, the goddess at whose shrine the ceremonies took place, was such a divinity. She is called Juno Dea Dia in the prayers and is thus identified with the goddess who represented the female principle of life—another divinity that the ancients declared to be a form of Terra Mater. Such a goddess was Flora too. There were many other goddesses not mentioned in the prayer of the Arvales who had similar functions. Venus, particularly as the Julian *gens* honored her as the mother of their race, was closely allied to the all-embracing Mother Earth. Indeed all the great female divinities of Italy—like those of Greece—Fortuna Primigeneia of Praeneste, Juno Sospita of Lanuvium, Diana Nemorensis of Aricia, Mater Matuta of Satricum, were local goddesses of fertility, a fact that is clear from the votive offerings in their shrines—the figures of kourotrophos type and the many symbols of fruitfulness which their worshippers dedicated to them. They represent local cults which had in their development acquired something of the character of the great earth divinity whose worship is perhaps the most universal feature of primitive religion.

The cult offered to these divinities, who in time usurped most of the functions of Mother Earth, furnishes a partial explanation for the scant evidence in dedicatory inscriptions for the worship of Tellus or Terra Mater. But, as Albrecht Dieterich's remarkable study

[1] Samter, *Röm. Mitt.* VIII (1893), pp. 222-225.
[2] Compare the bas-relief from Verona on which Hermes and Ge are represented, Carcopino, *op. cit.* PL. XVIII, opposite p. 718. See discussion p. 309 below.
[3] Ovid, *Fasti*, VI, 267. Vesta eadem quae terra. Cf. Arnobius III, 32.
[4] Daremberg et Saglio, III, 2, fig. 4351.

Mutter Erde has shown, Mother Earth herself, as the Greek Ge and the Roman Tellus or Terra Mater, retained a preëminence in popular rites that was far greater than the evidence for public cult would seem to indicate. Offerings were made to Ge at marriages and at the birth of children, and she was constantly worshipped with the spirits of the departed. The scattering of barley corns on the altar and the pouring of water on the ground before sacrifice (*πρόθυμα*) were rites in her honor.[1] Tellus or Terra Mater had a similar importance at Rome in the rites of the people. She was called upon in marriage ceremonies and was often regarded as the chief guardian of marriage, though one of her doublets, Juno Pronuba, tended to displace her there. She had her place too in the old rites by which the father, in acknowledging the new born child, lifted it from the earth, its mother. She received the sacrifice of the *porca praesentanea* in the burial rites, in which, by a popular conception that the inscriptions show the Romans to have shared with other peoples, she was thought of as receiving again into herself those whom she had created. She shared too in ancient agricultural ceremonies. The farmer, before cutting his grain, sacrificed to her the *porca praecidanea*, a curious old offering that seems to have been intended originally to propitiate earth and make her yield even if the proper offices had not been paid to the dead. Besides all these popular sacrifices she had her part in official worship. In the ancient formula of the *devotio* it was to her and to the *Di Manes* that the Roman general consigned himself and the legions of the enemy. Among the festivals of the Roman year, the Fordicalia on April 15 was her chief celebration, though she had sacrifices on other occasions too. On it, by one of the oldest and most barbaric of Roman rites, pregnant cows, *fordae boves*, were sacrificed to her.

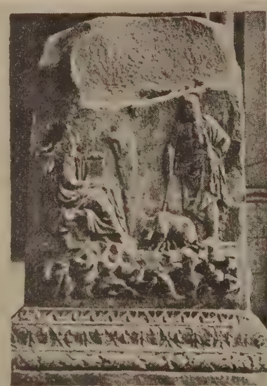

FIGURE 4. ALTAR OF THE BELVEDERE—SIDE

Telluri plenae victima plena datur, Ovid says of the sacrifice (*Fasti*, IV, 634). The unborn calves were cut from the victims and burned by the Chief Vestal and at the Parilia six days later their ashes, along with the blood of the October horse, were distributed to the people to be used for expiatory purposes.[2]

[1] Stengel, *Opferbräuche der Griechen*, passim. His interpretations have been in part questioned by Eitrem, *Opferritus und Voropfer der Griechen und Römern* (1915), p. 416.

[2] On the details of the cult at Rome, see Wissowa, *R.K.* [2], pp. 191 ff.; Dieterich, *Mutter Erde* [2] (1913).

Thus Tellus, though she seems to have had only one temple at Rome, a comparatively unimportant one on the lower slopes of the Esquiline, was associated among the Romans, as Mother Earth has been among men generally, with all the great moments of life—birth, marriage, death—and was familiar in state ritual of a primitive type. It is not strange to find her having a part in Augustus's religious reforms, and a part more completely her own than the worship of Venus Genetrix, the mother goddess of the Julian House, could give her. When in 17 B.C. Augustus celebrated the Ludi Saeculares, he devoted the third night to her (*C.I.L.* VI, 32323). At the spot called Tarentum in the Campus Martius he sacrificed to her a pregnant sow, black in color to denote its association with a chthonic divinity. The ceremonies on that occasion, like all other religious observances performed by order of the Sibylline Books, followed the Greek rite.[1] Yet the victim, a pregnant sow, is known in the cult of Tellus at Rome as well as in the worship of the Greek Ge. As Ovid said of the sacrifice at the Fordicalia, it was a teeming victim for the teeming earth, the sort of offering that is characteristic of the worship of the mother goddess. Mother Earth's part in the ceremony comes out in Horace's familiar lines in the Carmen Saeculare:

> Fertilis frugum pecorisque Tellus
> Spicea donet Cererem corona;
> Nutriant fetus et aquae salubres
> Et Iovis aurae.

Though there are no other references to Terra Mater in official cult inscriptions of the Augustan Age, the goddess, in widely varying types, had great prominence in Augustan art. Three of the splendid patriotic representations of the times, the Ara Pacis, the breastplate of the Augustus of Prima Porta, and the Gemma Augustea give her an important place. The representations are, I believe, indicative of the worship given her as the mother of the Lares Augusti, the divinities whose worship Augustus combined with his Genius and made the great unifying force of the Roman state religion.

The identification of the destinies of Rome with the Julian House, which the great temples of Divus Julius and of Venus Genetrix had long suggested, was brought forcefully before men's minds by the publication of the Aeneid in 17 B.C. In that same year occurred the celebration of the *Ludi Saeculares*, with their emphasis on the establishment of a new era, and the ceremonial adoption by Augustus of his grandsons Gaius and Lucius, about whom the emperor's hopes for founding a dynasty centred. The time was ripe for a religious reorganization which would symbolize the union of state and dynasty

[1] The Greek text is preserved to us by Phlegon. Quoted in the Kiessling-Heinze edition of Horace's Odes (1917), pp. 480–481.

by making the household gods of the Julian *gens* objects of state cult. But such a reorganization was difficult, indeed practically impossible, until the death of Lepidus in 13 B.C. left vacant the office of *pontifex maximus*, the priesthood that carried with it the headship of the Roman state family. When Augustus's election to the office took place on March 6, 12 B.C., crowds, such as had never been seen before, thronging to Rome to the ceremony (*Mon. Anc.* 10), the emperor proceeded to organize into public cults the gods of his household. He turned into public shrines his private sanctuaries of Vesta and the Penates on the Palatine, and he restored the ruined shrines of the Lares at the cross roads as shrines of the Lares Augusti,

FIGURE 5. TELLUS RELIEF FROM THE ARA PACIS

the ancestral spirits of his house.[1] The centre of the new worship was perhaps the *Ara Gentis Iuliae* on the Capitoline, the hill that was always the scene of important sacrifices in the imperial cult.[2] With

[1] The correspondence in date between these events is not always realized. For the establishment of the shrine of Vesta on the Palatine see *C.I.L.* I², p. 317. The restorations of the shrines at the *compita* took several years and the reorganized cult dated its beginning in the different *vici* from various years between 12 and 7 B.C., but the earliest date accords with the year when Augustus became *pontifex maximus*. For the evidence see *C.I.L.* VI, 454n and Mommsen, *Gesammelte Schriften*, VII, p. 181. I hope to discuss the whole subject more fully in a forthcoming monograph on the beginnings of emperor worship.

[2] There is no evidence as to when this altar was erected. It is known only from one reference in the *Acta Fratrum Arvalium* and from the military Diplomata which were placed there between the years 68 and 71 A.D. Cf. *C.I.L.* III, pp. 845–850. The altar of the *Gens* was the natural place for sacrifices to the Genius, and the two places in Rome where public sacrifices to the emperor's Genius seem to have taken place were the Capitoline hill and the Forum of Augustus. Cf. Henzen *Acta Fratrum Arvalium, passim.* The Forum of Augustus was dedicated in 2 B.C., and sacrifices to the Genius could not have been begun there until that date. Probably from the year 12 B.C. it had been customary to take oaths by the emper-

the Lares, Augustus established the cult of his Genius, the power that denoted the continuity of his house, and in the shrines at the *compita* the new divinity henceforth had statues between the Lares (Ovid, *Fasti*, V, 145). Genius, a god of fertility, had a natural place at the cross road shrines, where among the Greeks Hermes had an ancient worship as a phallic divinity and where Liber Pater, a similar god, who, significantly enough, had a statue on the Ara Gentis Iuliae,[1] belonged to primitive cult in Italy.[2] We hear nothing in the Augustan reorganization of Mania, Mater Larum, the goddess who, as we have seen, shared with the Lares in the festival of the Compitalia, but we find her upon a monument which represents the establishment of the cult, an altar of unknown provenience, now in the Cortile Belvedere of the Vatican. Unlike the other known altars of the Lares Augusti, which were set up by the slave and freedman officials of the *vici* of Rome, this one was erected by the senate and people of Rome.[3] On its front (Fig. I), between two laurels, the familiar emblem which Augustus took from his patron Apollo, is a floating figure of victory carrying a shield. On the shield is the inscription (*C.I.L.* VI, 876): Senatus populusque Romanus imp. Caesari divi f. Augusto pontif. maxim. imp. cos. trib. pot. The title *pontifex maximus* fixes the date of the altar as not earlier than 12 B. C. The scenes on the other faces of the altar suggest that it was dedicated shortly after that date.

The face opposite this (Fig. 2) represents an apotheosis, perhaps of Augustus. In a chariot drawn upward by four winged horses is the standing figure of a man with a mantle drawn about him. Above are representations of Caelus and Sol. On the left of the chariot stands a figure clad in the toga, perhaps Agrippa.[4] On the right is the figure of a woman, her hand raised to heaven, and beside her are two small figures. The group probably represents Livia or Julia with the young Gaius and Lucius.

On the narrow faces are the two scenes that denote the cult of the Lares. One of them (Fig. 3) shows an altar, on one side of which stands a figure clad in the toga, which is drawn over his head in the manner familiar in scenes of sacrifice. On the right of the altar are three rather obscure figures. The one nearest the altar with the mantle drawn over the head holds a statuette representing a Lar of

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or's Genius. (*Cf.* Horace, *Ep.* II,1, 15–16 and Mommsen, *Gesammelte Schriften* VII, pp. 179 ff.) and it seems likely that the establishment of the Ara Gentis Iuliae goes back to that date.

[1] A military diploma (*C.I.L.* X 1402) was set up in podio arae gentis Iuliae latera dextro ante signu Lib. Patris.

[2] Cf. Augustine, *De civ. Dei*, VII, 21.

[3] See Amelung, *Die Sculpturen des vatikanischen Museum*, II, pp. 242 ff.; Helbig, *Führer* [3] I, pp. 102 ff. Perhaps if we knew the provenience of the altar we should find that it came from the Capitoline Hill where the Ara Gentis Iuliae was.

[4] Agrippa died only a few weeks after Augustus became *pontifex maximus*. See Gardthausen, *Augustus und seine Zeit*, I, p. 860.

the familiar type and is reaching out to take from the man in the toga a similar statuette. The two figures are probably Augustus and a priest, and the scene shows the institution of the cult of the Lares Augusti.

On the remaining face of the altar (Fig. 4) is another scene that refers to the same cult. On rocky soil beside a tree trunk lies the sow of famous omen:

Litoreis ingens inventa sub ilicibus sus[1]

To the right is a bearded man leaning on a staff, obviously Aeneas as he sees the sow, the omen described in the eighth Aeneid. To the left sits a figure completely shrouded in a mantle and represented as holding a roll. This figure has been convincingly identified as Terra Mater by Carcopino who compares the similar seated figure of Ge on a bas relief from Verona which represents the goddess with Hermes standing before her. She is obviously the Earth Mother in her familiar mantic function as the giver of oracles, the divinity for whom the pregnant sow was the most fitting victim, whom indeed one story actually identified with the famous sow who bore a litter of thirty young.[2] She is identical, as Carcopino's illuminating discussion has shown,[3] with the Maxima Juno to whom Aeneas sacrifices the sow in the eighth Aeneid, which the artist undoubtedly has in mind (*Aen.* VIII, 81–84):

FIGURE 6. SACRIFICE FROM THE ARA PACIS

Ecce autem subitum atque oculis mirabile monstrum
Candida per silvam cum fetu concolor albo
Procubuit viridique in litore conspicitur sus;
Quam pius Aeneas tibi enim tibi, maxima Juno,
Mactat sacra ferens et cum grege sistit ad aram.

Servius's comment on Maxima Juno in this passage makes it clear that the ancients were familiar with this interpretation of the goddess: et dicunt theologi ipsam esse matrem deum, quae terra dicitur; unde etiam *et* porca ei sacrificatur.

[1] Verg. *Aen.* VIII, 43.

[2] Though a black sow, such as was offered at the *Ludi Saeculares*, was the more usual sacrifice, the white color of this victim has its parallels in Greek ritual. Thus according to the provisions of the Milesian calendar, a white pregnant sow was sacrificed to Here Anthie. Hecate's victims were white as well as black dogs. Cf. Stengel, *Griechische Kultusaltertümer* [3], p. 151.

[3] Cf. Carcopino, *op. cit.* pp. 716 ff. and plate XVIII. In my review of Carcopino's book, *A.J.P.* 1920, pp. 396 ff., I failed to realize the importance of the discussion of *Maxima Juno.*

If Aeneas is here, as he is often believed to be in the Aeneid, the prototype of Augustus, it may not be too fanciful to find a further significance in this scene which shows Augustus, the new *pontifex maximus*, making his private gods the centre of the state cult. In the tradition which Vergil follows, the sow's thirty young foretell the thirty years that will intervene until the founding of Alba.[1] Perhaps we have here an indication of the thirty years that Augustus has waited for the office of *pontifex maximus* which enabled him to reorganize on a new basis the state religion, ideally indeed to found the city anew.[2]

There is another monument of the period which, like the altar in the Vatican, shows the important part that the earth goddess, the mother of the Lares, had in the Augustan cult. That is the Ara Pacis Augustae, vowed on Augustus's return in 13 B.C., the year before he became *pontifex maximus*, and dedicated four years later. On the left of the east door[3] of the monument was the beautiful relief of Tellus (Fig. 5), the earth goddess in a hitherto unfamiliar type that seems to be under the inspiration of the great Augustan poets, Horace in his lines already quoted from the Carmen Saeculare which give us the goddess with the Aurae, and Vergil in the famous panegyric on Italy which, as Van Buren has shown,[4] is rich in suggestions for the emblems that accompany the goddess. On the right of the west door, united to the Tellus relief by the splendid procession of the south side, is a relief showing a scene of sacrifice, a slab of which a portion was found in the excavation of 1903 (Fig. 6). It shows an altar toward which one of the two *camilli* in the scene is leading a victim that has been generally recognized as a pregnant sow. Above is a small shrine, in which are seated two figures with spears. Behind the altar is a tree, and beside it in the act of sacrificing is a figure with his mantle drawn over his head. The correspondence with the figure on the altar of the Vatican favors its identification with Aeneas.

That the Tellus slab and the scene of sacrifice belonged together

[1] See Carcopino, *op. cit.* pp. 682 ff.

[2] The importance which Augustus attributed to the priesthood is clear from the *Monumentum Ancyranum* ch. X where the emperor speaks of his unwillingness to take the office before Lepidus's death though it had been offered to him. Lepidus secured the office soon after Caesar's death in 44. He apparently died in 13 B.C., and the new election did not take place until the following year. See Mommsen's note on *Mon. Anc.* ch. X. From the time of the battle of Philippi in 42 when Caesar was avenged, Octavian might justly have considered himself Caesar's successor, and I would suggest that the thirty years cover the period 42–13 B.C.

[3] See Studniczka's restoration, *Zur Ara Pacis, Abh. d. säch. Ges. d. Wis., Phil. hist. Kl.* XXVII (1909), pp. 902 ff. Studniczka showed from the evidence of coins that the Tellus relief and the scene of sacrifice were probably not opposite each other as had formerly been supposed.

[4] Van Buren, *Journal of Roman Studies*, 1913, pp. 134 ff. where it is suggested that this relief is a representation of Italia. See the similar relief from Carthage illustrated by Van Buren pl. V.

was suggested by Petersen[1] who however failed, when the new portion of the slab was discovered, to identify Aeneas. But later writers on the Ara Pacis, with the exception of Wagenvoort, have rejected his suggestion and have followed Sieveking[2] who, though he was the first to identify Aeneas, insisted that each slab was too complete in itself to be associated with the other. Like Petersen, Sieveking saw in the small shrine the sanctuary of the Penates described as high on the Velia, and he associated with these divinities the sacrifice below. He too recognized in the victim a pregnant sow, but he failed, as have other scholars,[3] to realize that by the fixed laws of Roman sacrifice such a victim could not be offered to any divinity except the mother goddess earth under one of her many forms. Dionysius's statement (I, 51) that the sow and her new born young were sacrificed τοῖς πατρώοις θεοῖς in the place at which the people of Lavinium still had a very sacred shrine in his day may at first sight give some support to the theory that the sacrifice was being made to the two Dioscuric divinities in the shrine above, for the πατρῷοι θεοί of Aeneas are obviously the Di Penates who had a very ancient shrine at Lavinium. But though the Penates themselves are usually represented as two youths of Dioscuric type, the word Penates is actually an inclusive term. According to ancient scholars (Servius on *Aen.* III, 12) the Penates were derived from the Cabiri, μεγάλοι θεοί of Samothrace, a group of divinities which included the mother goddess. In Roman cult the Di Penates were properly all the divinities of the household; they seem regularly to have included Vesta, the goddess whose relations with the Mother of the Lares[4] we have already considered. In such a group the sow was obviously offered to the mother while her young went to the divini-

FIGURE 7. FROM COHEN. MÉD. IMP. II, P. 393

[1] Petersen, *Ara Pacis Augustae*, pp. 49–54.
[2] Sieveking, *Jh. Oest. Arch. I.* 1907, pp. 175–90.
[3] See however the recent discussion by H. Wagenvoort Jr. *Ara Pacis Augustae* in *Mededeelingen van het nederlandsch historisch Institut te Rome*, Vol. I (1921), pp. 100 ff. The author rightly insists that the Tellus relief and the scene of sacrifice are mutually complementary. He compares the sacrifice to Genius loci, Tellus, and the nymphs in *Aen.* VII, 133 ff. and suggests that the sacrifice of the sow is made to the same group of divinities, and that the Penates stand by simply as witnesses. He fails, however, to recognize the necessity from the laws of ritual of associating the sacrifice with Tellus.
[4] Cf. Wissowa, *R.K.*², p. 163.

ties who accompanied her and were often thought of as her children. By a common confusion they are referred to either as Lares or Penates. A similar confusion is, as we have already noted, familiar in art. The type of the figures in the shrine on the Ara Pacis not only suits the representations of the Penates; it accords with the Lares as seen on a coin of the Gens Caesia reproduced by Professor Waites (*A.J.A.* XXIV, p. 251, Fig. 1). The old statues of the Lares Praestites seem to have been similar figures, though represented as standing, not seated. Apparently until the Augustan reform made the curly-haired dancing type the common representation of the Lar,[1] these Dioscuric types were usual for the Lares as well as for the Penates. The shrine in the relief might then be not the temple of the Penates on the Velia, but another elevated temple, the *aedes Larum in summa sacra via*, the restoration of which Augustus mentions with the temple of the Penates in the Monumentum Ancyranum. It is particularly hard to decide which temple is represented because the cults of Lares and Penates were being reorganized simultaneously just when the Ara Pacis was erected.

In any case the sacrifice of the sow, both on the Vatican altar and on the Ara Pacis, belongs to the mother goddess, mother alike of the Lares and of the Penates. The young must have been offered to her children; the pig, as we have already noted in connection with Cassius Hemina's account of the Lares Grundules, was the most common sacrifice to the Lares. The sacrifice of the sow and her young continued to be represented in art. It is found on two sarcophagi of the second century,[2] and on two Antonine coins, one of which, with its elevated shrine, recalls in many details the scene on the Ara Pacis (Fig. 7.)

A word may be added about the widely varying types under which Mother Earth was represented.[3] Except for the very similar relief from Carthage, which has often been thought to belong to a replica of the Ara Pacis, there are no other representations which have the richness of attributes which we find in the figure from the Ara Pacis. But the figure of the goddess with the two children on the Gemma Augustea and on the breast-plate of the Augustus of Prima Porta goes back to the same conception of Ge Kourotrophos. Quite different from these representations, and much more like the statues of Vesta that finally became typical, is the seated veiled figure on the altar from the Vatican, though the roll which the goddess holds there is unusual. As the altar from Verona shows, the same general type was known for Ge. It is found for Terra Mater too (in this case the

[1] This type, it is interesting to note, seems to have been derived from representations of the Cabiri, cf. Waites, *op. cit.*

[2] Sieveking, *Röm. Mitt.* 1917, p. 168. One of the sarcophagi is known only from a Renaissance copy.

[3] See Van Buren, *l.c.* and J. A. Hild, *s. v. Tellus*, Daremberg et Saglio.

attributes are sceptre and patera) in the statue of an *aedicula* found at Rome.[1] So Terra Mater appears too, I now believe, in the veiled figure with patera and cornucopia on the altar of Manlius, which, as I have elsewhere shown, is a monument of the imperial cult (*A.J.A.* 1921, pp. 387 ff.).

The representations of the earth goddess which we have considered show that Augustus's religious reform, like the Christian church at a later period, made full use of the popular faith in Earth, the mother of all life. There is, as we have seen, little evidence for the official cult of the goddess in the literature and inscriptions of the period; there are furthermore few representations of her from the art of the Empire after the Augustan Age. We have to depend on scant material too for our knowledge of the rites in honor of the goddess. Yet an occasional bit of evidence like the expiatory sacrifices of the Arval Brethren and the dinner which they threw down the slope to Earth as Mother of the Lares shows that she retained in official ritual something of the hold that we know she kept on popular belief.

Lily Ross Taylor

Vassar College

[1] Reproduced, Daremberg et Saglio, *s.v. Tellus*, fig. 6780.

Archaeological
Institute
of America

A MYRONIC HEAD IN THE FOGG MUSEUM OF ART

THE colossal helmeted head [1] which was acquired a few years ago by the Fogg Museum of Cambridge, Mass., and which now occupies a conspicuous place in the lower gallery of the Museum, not far from the world-famous Meleager, presents features that are in their

FIGURE 1. MYRONIC HEAD IN THE FOGG MUSEUM

[1] See *Fogg Art Museum Notes*, Vol. I, 1921, pp. 3–6; the head is also noted in Chase's *Greek and Roman Sculpture in American Collections*, 1924, p. 71, fig. 81. I am deeply indebted to Director Edward W. Forbes and Professors Paul J. Sachs and George H. Chase of the Fogg Museum of Art for their very kind permission to publish the head.

present state interesting rather than attractive. The whole of the marble surface is considerably scratched and marred; a third of the nose is gone; and the lower part of the face, from the upper lip, is likewise missing. The head has also suffered damage in the rear, and a portion of the helmet itself, behind the right ear, has been destroyed. Furthermore, the ears—especially the right—have been hardly dealt with at the hands of time or of vandals. Its extended series of mishaps has thus produced in the head an appearance of unsightliness which must have been wholly foreign to the original

FIGURE 2. MYRONIC HEAD IN THE FOGG MUSEUM

product. It is only when we examine the details of the workmanship that we begin to understand something of what must have been the true nature of its artistic perfection.

That the head is a rather poor and careless Roman copy of a splen-

did prototype there can be little occasion to doubt. Although the use of the drill is to be seen on sculptures as old as the marbles of Aegina,[1] the use to which this implement has been put in the present instance seems alone to preclude the possibility that we have to do with an original Greek work. Its operation is very apparent in the cutting of the nostrils, the ears, and beneath the rim of the helmet on the right temple. This in itself might not arouse our suspicions were it not for the drastic treatment of the eyes. Apparently to save himself the trouble of making a series of very delicate cuttings with the chisel to represent the lachrymal-canals, the copyist has resorted to the crude and labor-saving method of boring deep holes at the inner extremities of the eyeballs. He has also been very unfortunate in his shaping of the curves at the juncture of brow and nose. Presumably the left brow, with its goodly contour, was executed first; later the artist, though he must have observed that his treatment of the right brow was dissimilar, declined to take the trouble of retouching them so as to gain uniformity. The outlines of the helmet, too, present certain irregularities. Not only is there a difference of treatment to be seen in the volutes which terminate the visor, but the latter is itself longer on the right side than on the left. Judging by the position of the *konos*, or ridge, of the helmet in relation to the medial line of the face, the casque is sitting fairly and squarely on the cranium. On the other hand, the visor extends fully an inch further to the rear on the right side than on the left. There is also observable a difference in the fit of the helmet on either side of the face. On the left, it lies closely against the skin of the temple; on the right, the rim is undercut just in front of the ear.

The helmet is of the ordinary Attic type which was commonly used in the Greek armies of the fifth and subsequent centuries, and was later adopted, with slight modifications, by the Romans. It presents no features whatsoever in the present example other than the visor and ridge, or *konos*, which extends up the back from the base of the skull to a point somewhat in front of the crown of the head. It may be that a crest was originally attached in the form of a separate piece of marble; such, at least, we might expect to be true on the analogy of the armed figures from the pediments of the temples of Aegina and Olympia.

So completely is the scalp of the warrior covered by the closely-fitting Attic helmet that only three tufts of hair are visible—one on each cheek in front of the ears, and one at the rear of the head. These are thin and lank and very slightly wavy, and provide little indication as to what the treatment as a whole might have been, were the head-gear absent. The truth of the matter apparently is that when an artist of the first half of the fifth century allowed

[1] See Brunn, *Geschichte d. gr. Künstler*, I, p. 253.

but a lock or two of the hair to appear, he regularly treated the tufts shown very sketchily, as a feature worthy of little consideration. At any rate this is quite manifest in the case of the pedimental figures of the temple of Zeus at Olympia. Side by side we see men with bare heads and men wearing helmets or with their hair bound in a head-band. In the first instance, the locks are generally treated with a high degree of care and elaboration; in the latter, such hair as does appear is merely blocked out and scratched with the chisel. I feel, therefore, that in our estimate of the style of the head, we are justified in wholly disregarding this element.

The ears of the Fogg head are fashioned with considerable care, and display no trace of the swelling and thickening so frequently seen among ancient athletes and soldiers.[1] It is noticeable that the scroll of the visor rests upon the helix of the right ear; but the sculptor has failed to achieve a realistic solution of the situation. The ear ought, indeed, to bend outward; instead, we find the helix disappearing in the visor in an impossible manner.

What remains of the face would indicate a visage originally long and lean, the cheeks being clearly marked off by furrows from the heavy and dimpled upper lip. The brow is but slightly moulded. It possesses, however, a faint bar above the eyes, and at its lateral extremities there is a very strong indication of the bony ridges known to anatomists as the *processus zygomaticus* and the *linea temporalis*. The almost straight line of the forehead is continued down the nose to a point midway between the eyes. The outline of the eyebrows and of the nasal bridge is hard and clear-cut. The nose itself is markedly short and broad, with wide-flaring nostrils.

Apart from the presence of the stupid drilling which we have noted at the inner ends of the eyes, these organs are remarkably well and pleasingly worked, and must have imparted a very considerable degree of charm to the countenance of the soldier in its original form. They are of moderate depth, are set far apart, and the lids, which slightly overlap at the outer extremities, are delicately formed; indeed, the relative length and height of the exposed eyeballs conform closely to the Praxitelean proportions. The expression of the eye is quiet and thoughtful—an effect which is enhanced by the slight creasing of the skin at the outer ends of the eye-cavities. The direction of the gaze is a trifle downwards; unfortunately, we are unable to visualize with any degree of accuracy the expression of the face as a whole, for the mouth, here missing, often performs in this respect an equally important function with the eye itself.

The helmeted head has been labelled by the authorities of the

[1] For a discussion of the swollen ear on Greek statues see Hyde, *Olympic Victor Monuments and Greek Athletic Art*, 1921, pp. 167–171; also pp. 297, 319, 320.

Fogg Museum as "of the type belonging to about the year B.C. 450." By reason of its being somewhat above life-size and possessing a certain degree of idealization, it has been regarded as perhaps the head of a statue of Ares;[1] it undoubtedly possesses certain features in common with the Ares Borghese in the Louvre. As yet however, it has not been connected with any particular school of sculpture.

If close attention is paid to the stylistic details of the head, rather than to the general effect of the work as a whole, its affiliations with the products of the school of Myron become, I think, immediately apparent. The outstanding features of the head may be thus summarized: (1) a relatively low forehead, flattened at the temples, but with clear indication of the bony processes of the temporal region; (2) a short nose with wide nostrils; (3) quiet eyes, long and narrow, with lids of the average fifth century prominence, but showing a certain individuality of treatment at the outer extremities of the eye-sockets; (4) a long face, with lean cheeks, which are marked off by furrows from a somewhat heavy upper lip.

Now, these characteristics are to be discerned to a marked degree in the various works which have been attributed to the great master of the Transitional Period, more especially in the head of the Lancellotti copy of the Discobolus,[2] which is undoubtedly the most faithful copy of the original which we possess, and—to mention a work which is generally, though not with the same degree of confidence, attributed to Myron—the Riccardi head in Florence [3] and its replica in Berlin.[4] The same points of similarity are even to be seen, *mutatis mutandis*, between the Fogg head and that of the Frankfurt Athena.[5] The latter is the only helmeted type that has as yet been associated with Myron. But, as the helmet of the goddess is of the Corinthian form, it is obvious that the problem presented to the artist was here wholly different, and certainly more complex, than the one to be met in modelling the Attic helmet of the Fogg head.

In a greater or lesser degree the same similarity of traits is manifested when we compare the work under consideration with the individual members of the series of heads which have been from time to time attributed, with a reasonable degree of certainty, to the authorship of Myron. Of these may be mentioned the copy of the head of Perseus in the Antiquarium at Rome,[6] the Ince Blundell

[1] *Cf.* Chase, *Greek and Roman Sculpture in American Collections*, p. 71.
[2] Brunn-Bruckmann, *Denkmäler*, pls. 256, 567.
[3] Furtwängler, *Meisterwerke*, pl. 17.
[4] *Ibid*, pl. 18.
[5] *Cf. Jahreshefte*, vol. XII (1909–10), pls. 4–5. There is an inferior copy in Dresden: *Jahrbuch*, vol. XXIII (1908), p. 153, fig. 8; p. 152, fig. 10; p. 157, fig. 13.
[6] Brunn-Bruckmann, *Denkmäler*, pls. 603–604.

head,[1] the Perinthus head [2] now in Dresden, the British Museum Heracles,[3] two heads in the Ny Carlsberg Glyptotek at Copenhagen.[4] Indeed, so striking is the agreement in details which are distinctively and in some instances peculiarly Myronian, that I am persuaded that in the case of the Fogg head we have to do with a Roman copy not merely of some product of the school of Myron, but rather of one from the hand of the master himself. So far as can be seen, there is no mingling of mannerisms, no trace of eclecticism; everything is frankly and thoroughly Myronian.

According to ancient authorities, Myron was the author of no fewer than five statues which were set up in honor of victors at Olympia. Of these one was a runner,[5] another a boxer,[6] the third a pancratiast.[7] The fourth, Lycinus of Sparta, had the distinction of dedicating two statues[8] in commemoration of his victories. Apparently a man of wealth and distinction, he met with success in the hoplite-race, presumably in the year B.C. 448,[9] and at the next Olympic Games was victorious in the contest of chariots. He therefore, according to Pausanias, commissioned Myron, the greatest sculptor of the age, with the execution of two statues which were seen by the great traveller to the south of the Heraeum at Olympia.[10] The statement of Pausanias regarding the dedication is not particularly explicit, and thus Förster has been led to conjecture that the figures set up commemorated the victory of Lycinus in 444 only, and represented both himself and his charioteer.[11] A much more rational view is that of Robert [12]—who is followed by Hyde [13]—wherein he maintains that the first victory of Lycinus did not pass unheralded, and that thus the first statue must have been erected in 448 and represented the dedicator in the guise of a hoplite runner.

The contestants in the hoplite-race, of which perhaps the best ancient representation is seen on a red-figured cylix in Berlin,[14] were regularly equipped with helmet and shield, sometimes with greaves, and perhaps even with other pieces of armor. The tendency in later times was, according to Pausanias,[15] to reduce the number of these handicaps. The victorious runner was honored with a statue

[1] *Cf. Arch. Z.*, vol. XXXI, 1874, pl. 3.
[2] Brunn-Bruckmann, *op. cit.*, pl. 542.
[3] *Ibid.*, pl. 568.
[4] See Catalogue by Arndt, pl. 36.
[5] Pausanias, *Graeciae Descriptio*, VI, 13, 2.
[6] *Ibid.*, VI, 8, 5.
[7] *Ibid.*, VI, 8, 4.
[8] *Ibid.*, VI, 2, 1–2.
[9] *Cf.* H. Förster, *Die Sieger in den Olympischen Spielen*, 211a.
[10] *Cf.* Hyde, *op. cit.*, p. 342.
[11] Förster, *loc. cit.*
[12] *Hermes*, vol. XXXV, 1900, p. 172.
[13] Hyde, *op. cit.*, p. 187, n.6; *cf.* p. 265, n. 11.
[14] Cat. no. 2307; Gerhard, *Auserlesene Vasenbilder*, vol. IV, pl. 261.
[15] Pausanias, VI, 10, 4.

which wore a helmet, and sometimes bore shield and greaves as well.[1] It is curious that so small a number of statues of hoplitodromi has been preserved.

In the time of Lucian there seems to have been a law in force which forbade Olympic victors to set up colossal statues to their own honor and glory,[2] and certainly at all periods the life-size statue was the rule throughout the Greek world. But instances are not lacking—both from the sources of literary evidence and actual observation—of the occurrence of works which are considerably beneath life-size, and of others whose proportions border on the colossal.[3] In the case of such variations from the normal, we may readily conjecture that we have to do with the modesty or the arrogance, the poverty or the opulence, of the dedicator.

Now, we have seen that the Spartan Lycinus won a victory as a hoplite runner in the year B.C. 448, and that a statue—without doubt a helmeted one—was executed by Myron, and set up to commemorate the event at Olympia.[4] Moreover, Lycinus was a man of wealth, otherwise he had been unable to compete four years later with the costly quadriga, and withal was an arrogant Lacedaemonian. It is hardly likely that such a one would be content with a likeness of moderate proportions.

The head in the Fogg Museum is thoroughly Myronian in character; it is helmeted; a third greater than life-size; is of the style of the middle of the fifth century; and the degree of idealization which it bears is not too extreme to preclude the possibility of its being an Olympic portrait.

We are therefore led to the belief—absolute proof is, of course, lacking—that the head in the Fogg is a late Roman copy of a bronze original which was sculptured by Myron for Lycinus and set up at Olympia during or shortly after the year 448.

A. D. Fraser

Westminster College
New Wilmington, Pa.

[1] On the subject of Hoplitodromi see Hyde, *op. cit.*, pp. 161–4.
[2] Lucian, *Pro Imag.*, II, pp. 490 f.
[3] *Cf.* Hyde, *op. cit.*, pp. 45–6.
[4] Two other athletes of the same name are mentioned by Pausanias, one a native of Elis (VI, 7, 9), the other of Heraea (VI, 10, 9).

Archaeological
Institute
of America

NOTES ON THE TRIBUTE LISTS

Since the new edition of the Corpus, *Inscriptiones Graecae*, Vol. I, *editio minor*, will of necessity take its place as the standard work of reference for those who study the Athenian tribute lists, it may be well to note, without too much delay, some of the minor points in which the text of the new edition needs correction.

In *I.G.* I², 63, line 117, the name [Νότι]ον should be restored.

After the numerals preserved in *I.G.* I², 63, lines 125–130, should be restored the names: Ἡράκλειον, Σίγγιοι, Μηκυβερναῖοι, Γαλαῖοι, Τράιλος and Βορμίσκος, as follows:

X	[Ἡράκλειον]
Δ	[Σίγγιοι]
Δ	[Μηκυβερναῖοι]
Δ	[Γαλαῖοι]
T	[Τράιλcs]
X	[Βορμίσκος]

For the justification of these restorations *cf.* Meritt, *A Restoration in I.G. I, 37, A.J.A.* Vol. XXIX, pp. 26–28. The Island and Thracian panels are known to have occupied the first and fourth columns, respectively, in *I.G.* I², 63, and the restoration given above proves that the Hellespontine list immediately preceded the Thracian. The geographical groups of cities followed each other, then, in this inscription in the order of Island, Caric-Ionic, Hellespontine, and Thracian.

In *I.G.* I², 63, line 130 should be restored the name [Σόμβ]ια. Compare with this passage *I.G.* I², 64, line 80, and also *I.G.* I², 214, Col. II, line 15. The fact that the name appears in *I.G.* I², 63, and *I.G.* I², 214, as a place name only, and not as the nominative plural of the ἐθνικόν, indicates that the restoration in *I.G.* I², 64, should be Σόμ[βια] and not Σομ[βια . . .]. The name Σόμβια rather than Σομβια[νοί] should also appear in *I.G.* I², 220, Col. III, line 32. In this latter instance the tithe should be changed from [Δ]Γ⊢IIII to [𐅄Δ]Γ⊢IIII, since the assessed tribute on which the payment depended is given in *I.G.* I², 64, as XXXX. *Cf.* West and Meritt, *Cleon's Amphipolitan Campaign and the Assessment List of 421/0, A.J.A.*, Vol. XXIX, p. 63.

In *I.G.* I², 63, lines 161 and 162, should be restored:

[Πρίαπ]ος
[Παρὰ Π]άριο[ν]

on the analogy of *I.G.* I², 214, Col. II, lines 9 and 10.

In *I.G.* I², 64, line 27 appears the item Χερρ[ονησῖται] differing from the restoration of the same item in *I.G.* I, 37, fragment u, where the name appears as Χερρ[ονήσιοι]. The restoration of the old Corpus is correct and should be retained. The Χερρονησῖται were a Hellespontine people, and their name cannot have appeared in the Caric-Ionic list of *I.G.* I², 64.

In *I.G.* I², 64, lines 89–92, fragment *I.G.* I, 543, is out of place. The letters preserved on this fragment duplicate in part the letters preserved on *I.G.* I, 37, fragment z″, and the two stones cannot be united as parts of the same inscription. *Cf.* Bannier, Zu Attischen Inschriften, *B. Ph. W.*, 1916, p. 1067, for the assignment of *I.G.* I, 543, to *I.G.* I, 37 (*I.G.* I² 63), and the relative order of fragments z and z′ in that inscription. From line 2 of the notes above *I.G.* I², 64, consequently, should be deleted the words: b *I.G.* I, 543; and from the notes above *I.G.* I², 63, should not be deleted the reference to *I.G.* I, 543, as suggested in the *addenda et corrigenda* of the Corpus, p. 302.

In *I.G.* I², 64, line 96, the item Λάρι|σα should be restored to read [Λάρι]|σα.

In *I.G.* I², 196, Col. III, lines 38–45, the editors of the new Corpus have correctly joined *I.G.* I, 267, with fragment 36 of *I.G.* I, 231, as proposed by Wilhelm (*Anzeiger der Wiener Akademie*, 1909, p. 47) without observing, however, that the lateral face of the stone is preserved on *I.G.* I, 267. The fragment, consequently, cannot belong in the center of the stele (Col. III) as it has been placed in the Corpus. It belongs properly in the last column with the lateral surface of *I.G.* I, 267 forming part of the lateral surface of *I.G.* I², 196. The whole group to which *I.G.* I, 267, belongs (including Col. II, lines 31–45, and Col. III, lines 38–45) must be moved bodily two columns toward the right. *I.G.* I², 196a, is thereby excluded from the place it occupied in the restoration of the old Corpus, but it need not be removed entirely from *I.G.* I², 196, nor, in fact, be given a separate number, as in the new edition.

In *I.G.* I², 196, no numeral is given before the name Κῷοι, Col. IV, line 10, although the old Corpus preserves the sign ⊢. The numeral should be restored as [HHH𐅄Γ]⊢ on the analogy of *I.G.* I², 195, Col. I, line 7, and the entry in *I.G.* I², 196 will then read:

[HHH𐅄Γ]⊢ Κῷοι

In *I.G.* I², 196a, the spelling of Ὑ[δισῆς] (line 5) should be corrected to read Ὑ[δισσῆς].

In *I.G.* I^2, 199, Col. II, line 12, the name Διῆς appears alone, as indeed it does also in the old Corpus, *I.G.* I, 234, Col. II, line 12, p. 117. The letter H, which appears on the stone immediately after the name (*cf.* *I.G.* I, 234, p. 104) has been restored in the *editio minor* as part of a numeral in Col. III, line 12. One can determine, however, from the width of Col. II (*cf.* the long names Μηκυβερν[αῖοι] in line 23 and Δίκαια ⁝ Ἐρετρι in line 27) that the letter H of line 12 is too far removed from the figures of Col. III to form a part of any one of them. It must be restored as part of some epithet of Διῆς, such as ῾[οι ἐξ Ἄθω], on the analogy of Ἀκρόθῳοι | οἱ ἐν Ἄθῳ in *I.G.* I^2, 64, lines 123–124.

The names from *I.G.* I, suppl., p. 72, fragment 69a, which belong with *I.G.* I^2, 201, have been omitted from the transcript of that inscription in the Corpus. Col. V of *I.G.* I^2, 201, then, must be supplemented by reference to the old Corpus.

In *I.G.* I^2, 204, Col. I, line 72, Μυκόνιοι should read Μυκό[νιοι].

In *I.G.* I^2, 214, Col. II, line 16, the letters [. . . . .]ῆς should be restored. *Cf.* *I.G.* I, suppl., p. 175, 272e.

In *I.G.* I^2, 214, Col. III, line 19, Κλαζομένιοι should read Κλαζομέ[νιοι].

In *I.G.* I^2, 214, Col. III, line 20, the tithe of Ἐρυθραῖοι should read XHH instead of XH⊢I.

In the note beneath *I.G.* I^2, 214, instead of "III 9" at the beginning of the first line read "III 9 et 23."

In *I.G.* I^2, 218, Col. II, line 25, the tithe of Θραμβαῖοι should read ΔΓ⊢⊢C instead of ΔΓ⊢IIII. *Cf.* *I.G.* I, 259, Col. II, line 23.

In *I.G.* I^2, 220, Col. III, line 28, EK XEPPONE≶OY should read EK XEPPONE≶O (sic).

In *I.G.* I^2, 220, Col. III, line 33, Σερ . . . should be restored to read Σερ[ιοτειχῖται] *Cf.* Dahms, *De Atheniensium sociorum tributis quaestiones septem*, diss. Ber., 1904, p. 40, note 11.

I may also take this opportunity of saying that I do not think the tithe Γ⊢⊢⊢II of *I.G.* I^2, 212b, line 3, should be changed, as suggested in the *addenda et corrigenda* of the Corpus, p. 303.

I.G. I^2, 198: The two names restored in lines 4–5 in Col. II of this inscription are out of place. A reference to the old Corpus will show that they are found on the lateral face of frag. 46 (*I.G.* I, 235). So long as the principal face of the fragment was assigned to *I.G.* I, 235 (*I.G.* I^2, 200) the names of the lateral face of necessity fell in *I.G.* I, 233 (*I.G.* I^2, 198). But it has been known for some time that the names of the principal face themselves belong to *I.G.* I^2, 198 (*Cf.* notes to this effect in *I.G.* I, suppl., pp. 71 and 174), and the names of the lateral face, therefore, cannot also belong to the same surface of the stone, as in the new edition of the Corpus. In other words, we cannot move the principal face of the fragment, without

also changing the position of the lateral face. The two names in lines 4–5, Col. II, of *I.G.* I^2, 198, belong rather on the obverse face of the large stele, and should be included in *I.G.* I^2, 194 or 195.

In the notes preceding the text of *I.G.* I^2, 214, in the first line "A sinistra margo" should read "A dextra margo."

Benjamin D. Meritt

Princeton University

BOOK REVIEWS

Villanovans and Early Etruscans. A Study of the Early Iron Age in Italy as it is seen near Bologna, in Etruria and in Latium, by *David Randall-MacIver*, pp. 259, pls. 46. The Clarendon Press, Oxford, 1924.

The author of *Villanovans and Early Etruscans* is to be congratulated for having brought order and understanding out of a hitherto chaotic field of archaeology. Thorough familiarity with the collections of Italy together with a comprehensive knowledge of the scattered writings of Italian scholars and excavators makes this book of inestimable value to archaeologists of Prehistoric Italy.

The Villanovan problem is considered in three divisions, the Northern Villanovans, the Villanovans in Etruria and the Villanovans in Latium. The more important tombs in each of these regions are described and the finds listed—no easy task when one considers how meagre are the records of many of them. The numerous plates throughout the volume are of great value for stylistic study, reproducing as they do representative ossuaries, fibulae, girdles and weapons. On the page opposite the plates is a convenient description of the objects, the cemetery from which they came, and the museum in which they are now housed.

Among the interesting conclusions of the author we may note that the few inhumation burials in Villanovan cemeteries were not borrowed from the Etruscans, as has sometimes been supposed. He points out that primitive peoples are tenacious of their burial customs, and believes that when inhumations and cremations exist together it is evidence that two friendly races were living side by side. He suggests that the inhumations are those of Picenes, and proposes a similar explanation of the mixed burials in the early cemetery of the Forum.

The discussion of the Second Benacci period is concluded with a refutation of Ghirardini's theory that the center of the Bronze industry was among the Etruscans who learned it from the Phoenicians. The theory clearly cannot stand when one considers that the bronze situlae from San Vitale antedate the Etruscan products, and so are to be regarded "either as the spontaneous invention of the native Villanovans, or else as the result of an inspiration derived from their neighbours in Central Europe or the Balkans."

The Villanovans in Latium are considered to be of the same stock, but an older branch than those in the Bolognese region and in Etruria. In fact they are classified as Pre-Benacci dating back to the twelfth century.

In considering the Etruscans the difficult site of Vetulonia is treated at length since here the line of demarcation between Villanovans and Etruscans is clearly marked. Twenty-seven tombs are enumerated and described with the help of admirable photographs and drawings. The date of the Etruscans at Vetulonia is placed from 850–700 B.C. The Regolini-Gelassi tomb with the Bernardini and Barberini tombs at Praeneste are of the seventh century. These are tumuli and among the earliest of that type. This fact brings the author to the startling conclusion that the Etruscans did not bring their knowledge of tomb architecture from Asia Minor, for they were in Italy in the ninth century and showed no high degree of architectural skill before 700 B.C. This knowledge was gained later from foreign masters according to Randall-MacIver.

One wonders if the Etruscans all reached Italy at the same time, in the ninth century, or whether there may not have been a succession of colonists. Is it possible that among the later arrivals there were skilled artisans who brought with them knowledge of the architectural forms of their native land? It is difficult to become reconciled to a theory which entirely robs the Etruscans of their supposed architectural superiority.

Kate McK. Elderkin

Princeton, N. J.

Archaeology and the Bible, by *George A. Barton*, pp. 561, pls. 122, figs. 313, maps 9. Philadelphia, American Sunday School Union, 1925.

The book under consideration is now in its fourth edition. The first edition appeared in 1916, and in less than nine years we have a fourth edition, an indication of its great value, especially in view of the nature of the subject. Dr. Barton's book has in every respect been a complete success. The fourth edition has been brought thoroughly up-to-date.

The purpose of this book has been to gather into one volume—albeit a very fat one—the most valuable information of all sorts that excavations in Bible lands have afforded. The book is divided into two parts. The first part supplies as a background for the study of the Bible, a résumé of the history and civilization of the ancient Nearer Orient, as well as an outline of the history of its archaeology, and an account of the way in which our knowledge of the past has been reconstructed. Egypt, Babylonia, and Assyria, the Hittites and Palestine itself have come in for a clear and concise description and something has been said about western Asia Minor and Greece.

The second part of the book is in some respects the more important, for here we have the Babylonian Epic of Creation, the Legend of Adapa and the Fall of Man, the Babylonian Account of the Flood, the Tale of Two Brothers, the Tale of Sinuhe, the Legend of Sargon of Agade, the Israel Stela, the Code of Hammurabi, the Hittite and Assyrian Codes of Laws, the Tell el-Amarna Letters, the Report of Wenamon, the Moabite Stone, the Elephantine Papyri, the Precepts of Ptahhotep, the Chalice of Antioch, and many other archaeological finds, not only described in full, but also translated, wholly or in part, and discussed with a view to showing their use in illustrating, explaining, confirming, or contributing to our knowledge of the sacred text. Indeed, it would be quite impossible in a brief review to indicate anything more than a few of the famous archaeological discoveries which the author has drawn upon for the benefit of the student of the Bible.

The third great feature of the book is the 313 illustrations and nine maps. These illustrations bring vividly befor the student the various objects and sites which have been used in illuminating the pages of the Old and New Testament. An Appendix on "The Place of the Amorites in the Civilization of Western Asia" has been prepared for this edition. This was written with the work of Professor A. T. Clay in view. It is rather more technical than one would have expected for a book of this sort. Nevertheless, it deals with an important subject, and one which bears directly upon the Bible. Since 1909 Professor Clay has been developing his Amurru theory, which is, in brief, that in the fourth millennium B.C., the Amorites built up what became a great empire, which ruled Babylonia, and whence radiated the bulk of Semitic civilization, that the traditions of the Creation, the Flood, etc., were developed among the West Semites, and that there were no migrations of East Semites from Babylonia to the west, but that the migrations were the other way. It must be admitted that Professor Clay has a mass of evidence in his favor. Nevertheless Dr. Barton, in a sober and careful manner and with due regard to the learning and scholarship of his opponent, believes that he has furnished sufficient evidence to demolish the Amurru structure. Time alone will tell, for where two such doctors disagree it is hard to predict what the final issue will be. With this able Appendix the more interested student should read Clay's reply to it in the *Journal of the American Oriental Society*, Volume 45, pp. 119–151.

It would seem almost hypercritical to make suggestions in connection with such a splendid piece of work as this. But no reviewer can read a work, covering a field like this, without asking questions. Should the date of Mesannipadda be

taken quite so uncritically (p. 58), in view of the style of script to be found on the inscription discovered by Mr. Woolley (see Langdon, *Kish*, Vol. I, *passim*). Should not the new inscription of Seti I have received treatment somewhere in Chapter XIX? Surely the very important Precepts of Amen-em-ope should have been described and comparisons made with our Book of Proverbs. Budge's publication of it occurred early enough, namely, in 1923, and there is no piece of extra-biblical literature which contains closer parallels to the Bible than this. In fact, some phrases are such as to lead one to suppose direct borrowing or copying. Furthermore, quoted literature on certain inscriptions sometimes seems unnecessarily limited, as in the case of Langdon's so-called Sumerian Paradise and Fall, but of course limitations of space make their own demands. When all is said and done, however, it would be difficult to imagine a finer piece of work for the purpose for which the book was written. Professor Barton has the thanks of every modern student of the Bible, and the American Sunday School Union is to be congratulated in procuring Dr. Barton for this task, and in having published a book which is so clear, simple, compact, and complete, and which so well represents the best in modern biblical research.

SAMUEL A. B. MERCER

THE GREEKS IN SPAIN, by *Rhys Carpenter*, pp. 180, 25 p' . Longmans, Green & Co., NEW YORK 1925.

This is the sixth in the series of Bryn Mawr Notes and Monographs to which the author has already contributed a searching study of "The Esthetic Basis of Greek Art." The present book, described as the task for an idle year rather than a scholar's lifetime, is a fascinating account of the Greeks in Spain in which legend, record and archaeological evidence are brought together. The author presents the results of personal investigation of Greek sites in Spain and of close study of the Iberian monuments.

The path of the early Greek voyagers to Spain is clearly traced with the aid of names in *ussa*. It led over "the great island bridge" to Hemeroskopeion which the author has for the first time certainly identified with the modern Ifach.

The chapters on Iberian art in its relation to Greek contain many observations which are new and illuminating. Among the numerous bronzes of Santa Elena are three which clearly betray the influence of archaic Ionic style and at the same time the Iberianisation of the Ionic type with consequent loss of beauty. The Iberian bronzes, unlike the Greek, regularly reproduce the cast terra cotta figure whereas the Greek bronzes are Greek statues in miniature. The later absence of Greek influence in this region is ascribed to the exclusion of the Greeks from Tartessos by the Carthaginians. Greek influence lasted longest in the province of Murcia and here the native art was most mature. Yet this art retained its individuality. Where the Punic hold upon the country was tightest, the native work remained crude, a fact which leads the author to delightfully caustic comment upon Carthaginian art.

Greek influence is most clearly seen in the bust of Elche which is compared with the Chatsworth Apollo. A table of measurements reveals a surprising agreement. Professor Carpenter believes that fifth century sculptors always worked with some sort of measured scale and that the measurements of the Elche bust reveal the same practice. This wonderful work is not merely measured; it is justly appreciated.

The study of pottery decoration yields some remarkable parallels between ware found at Elche and Greek vases of the sixth century. Plate XIV reproduces animal forms of the two wares showing a startling similarity, particularly in the case

of the hare. Plate XV establishes equally well the borrowing by the Iberian potter of Greek "vegetabiliar" designs. Strangely enough the drawings of the developed Attic black-figure and red-figure pottery find no echo in Iberian, but the decorative tendrils of the later Greek ware of Southern Italy are popular.

These are but a few of the many suggestive observations which the author has brought together in a work which will stimulate interest in the Greeks of Spain and possibly lead to the excavation of Hemeroskopeion and other sites where they settled—a consummation devoutly to be wished.

George W. Elderkin

Numismatic Notes and Monographs. No. 25, A Bibliography of Greek Coin Hoards, by *Sidney P. Noe*, pp. 275. No. 26, Mithradates of Parthia and Hyspaosines of Characene: A Numismatic Palimpsest, by *Edward T. Newell*, pp. 18, 2 pls. The American Numismatic Society, New York, 1925.

To the excellent series of Numismatic Notes and Monographs published by this society are added two more. That on Greek Coin Hoards by Mr. Noe is a list, alphabetically arranged according to the place of discovery, the probable date of burial, the number and denomination of the pieces, the cities or rulers represented upon the coins, the present location of the hoard and a bibliography where one can get further details. The volume is provided with two indices, one of mints and rulers, the other geographical, which greatly facilitate the control of the material. Mr. Noe has included even unpublished hoards. On p. 179 the disposition of the coins of Croesus, which were discovered by T. L. Shear in 1922, is given as "In keeping of Amer. Archaeol. Soc.?" This famous hoard of thirty pieces of gold is now in the museum at Constantinople along with the architectural fragments which were brought from Sardis to the Metropolitan Museum of New York during the Greek occupation of Smyrna.

In the second of these monographs, Mr. Newell studies six copper coins, in his possession, which are dated to the reign of Mithradates II. These prove to be overstrikes on an earlier issue which bore the name of Hyspaosines, the first king of Characene. It thus appears that the Parthian mint reused as blanks coins of a hitherto unknown issue by that king. Mr. Newell suggests that the overstriking may have been a consequence of a military victory by Mithradates over Hyspaosines, the victory yielding as booty a large number of the latter's coins. The restriking was done in 122–121 B.C. The type of the original coin is restored by the author (Pl. II, 7). The monograph is a model of neat demonstration.

George W. Elderkin

ARCHAEOLOGICAL NEWS[1]

NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

EDWARD H. HEFFNER, *Editor*
University of Pennsylvania, Philadelphia

GENERAL AND MISCELLANEOUS

SARDINIA.—In *Rend. Acc. Lincei*, XXXII, 189–197 (8 figs.), ANTONIO TARAMELLI gives the results of several seasons of excavations on the picturesque Giarra di Serri in the province of Cagliari, Sardinia. Nuragic or Protosard fortification walls of considerable extent and in good preservation were found by him, and two temples, one with a well, perhaps indicating a connection with the worship of chthonic deities, and the other of a rectangular hypethral type. This had associated with it buildings for the initiation of believers and for the abode of the priest and was connected with the other temple by a *Via Sacra*, cut in part in the native rock. In a circular building near by, beneath the ruins of the collapsed dome, an altar with a votive bronze axe was found, that Mycenean or Minoan symbol of loud-thundering Zeus. A foundry for making various offerings and utensils and the rude palace of these Sardinian warriors were also found.

NECROLOGY.—**William C. Farabee.**—Through the death of Dr. William C. Farabee, Curator of the Section of American Archaeology and Ethnology in the University Museum, Philadelphia, which took place on June 24, 1925, anthropology and archaeology suffered a heavy loss.

William Curtis Farabee was born at Washington, Pennsylvania, February 7, 1865. He attended a state Normal School and later Waynesboro College from which he was graduated with the degree of A.B. Subsequently he studied at Harvard, where he received his A.M. and Ph.D. In 1903 he became an instructor in anthropology at Harvard and in this institution he remained until 1913. In that year he was appointed to the position in the University Museum which he held at the time of his death. In the same year he proceeded to South America in charge of the University Museum Amazon Expedition. He returned to the Museum after an absence of three years, during which he had explored a large area in southern British Guiana and in northern Brazil as well as in the little known area to the south of the Amazon. In the course of this expedition he also conducted excavations on the island of Marajo, where he obtained a large collection of Marajo pottery. Similarly he made an excursion to the upper Amazon and obtained a large collection of pottery from the Conebo Indians. The tribes among which he worked while in northern Brazil and southern British Guiana were of the Arawak and Carib stocks, some of which had not been visited by white men prior to Dr.

[1] The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor HEFFNER, Editor-in-charge, assisted by Professor SAMUEL E. BASSETT, Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Professor SIDNEY N. DEANE, Professor HAROLD N. FOWLER, Dr. STEPHEN B. LUCE, Professor CLARENCE MANNING, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor JOHN C. ROLFE, Professor JOHN SHAPLEY, Professor A. L. WHEELER, and the Editors.

No attempt is made to include in this number of the JOURNAL material published after June 30, 1925.

For an explanation of the abbreviations, see pp. 115–116.

Farabee's expedition. Accompanied by Mr. John Ogilvie, he penetrated into the heart of British Guiana. After severe hardships he finally reached the coast by way of the Corentyne River. Then he proceeded to Barbadoes to recuperate and from there returned to his task of exploring to the south of the Amazon and to pursue the excavations mentioned and the other work conducted north of the mouth of the Amazon. Out of this expedition grew two volumes by Dr. Farabee, *The Central Arawaks* and *The Central Caribs*, both published by the University Museum.

In 1922 the Museum sent an expedition to southern Peru, when Dr. Farabee again had charge. While he was excavating in the Nasca country in the interior of southern Peru he was attacked by fever and by inflammatory dysentery and before he could reach the coast and medical aid he was in an advanced state of exhaustion. A brief stay at a hacienda gave him strength sufficient to go up to Arequipa, where, it was hoped, a better climate would bring about his recovery. For the same purpose he made a trip by sea to the island of Juan Fernandez. But his strength had been too much impaired and he returned home by way of Chile and the Argentine. His illness was now pronounced to be pernicious anemia. He went to a farm in West Virginia and later to the old family homestead in Washington, Pennsylvania, where he died, having undergone forty blood transfusions.

Many honors and distinctions fell upon Dr. Farabee, among which were the gold medal of the Philadelphia Geographical Society, the gold medal of the Explorers Club of New York, membership on the Committee of Experts on Ethnology accompanying President Wilson to Paris, and United States representative at the celebration of the one hundredth anniversary of the independence of Peru in Lima. During the World War he was commissioned a captain in the United States Army and assigned to the Intelligence Department. His membership in the various scholarly societies included the Royal Geographical Society, the American Geographical Society, the Société d'Anthropologie, the American Philosophical Society, Phi Beta Kappa and Sigma Xi. He served as president of the American Anthropological Society. He was also made an honorary faculty member of the oldest institution of higher learning in the Western Hemisphere, the University of San Marcos.

Richard Berry Seager.—On May 12, 1925, Richard Berry Seager, one of the most brilliant archaeologists America has produced, died in Candia, Crete. He had been on a journey round the world and was apparently in perfect health when he suddenly became ill on the boat from Alexandria to Candia and died in Candia two days after his arrival. In token of the high esteem in which he was held in Crete he was given a public funeral. He is buried in the little English cemetery outside Candia.

Richard B. Seager was born in Lansing, Michigan, on October 20, 1882. After the usual preparation he entered Harvard College, but was compelled by heart trouble to drop out in the middle of his freshman year. He was ordered to Nauheim for treatments and continued his studies in Athens, Italy, etc., during the next few years, specializing in classics and archaeology. His first archaeological work was on the University of Pennsylvania expedition headed by Miss Harriet Boyd (Mrs. C. H. Hawes) where he was given charge of the excavation at Vasiliki near Gournia (1903–1904). The deep interest that he developed in Cretan problems caused him to build a house at Pachyammos in the eastern part of Crete, where he spent a part of most of his winters, and which served as his headquarters for his work at Mochlos, Pseira, Pachyammos, etc. His amazing discoveries on those sites he has described in a series of volumes published by the American School of Classical Studies at Athens, and by the University Museum of Philadelphia: *Excavations on the Island of Pseira, Crete* (1910); *Explorations in the Island of*

Mochlos (1912); *The Cemetery of Pachyammos, Crete* (1916); and in articles in the *American Journal of Archaeology*. Within recent years he became interested in the study of Greek coins, and he contributed a volume to the *Numismatic Notes and Monographs* published by the American Numismatic Society entitled *A Cretan Coin Horde* (1924). Besides archaeology his chief pastimes were travel and hunting. He hunted big game in equatorial Africa and the region of the White Nile on three occasions. During the war he was engaged in Red Cross work in Italy and Greece. He combined to an unusual degree a thorough knowledge of his subject with imagination and a spirit of adventure. These qualities made him not only a lucky explorer but a sound archaeologist whose judgment on prehistoric Cretan questions was of the best. Moreover, his great personal charm and his generous public spirit endeared him to all his friends and colleagues. He bequeathed his collections of Greek embroideries and Cretan antiquities to the Metropolitan Museum of Art; his collection of ancient Greek and Roman coins to the British Museum; and the residue of his estate, subject to a life interest to his mother, in equal shares to the American and British Schools at Athens.

EGYPT

Egyptian Accessions in Metropolitan Museum.—In *B. Metr. Mus.*, XX, 2, 1925, pp. 59–60, L. S. B. mentions briefly the Egyptian objects which reached the Museum during the preceding summer. Because of delay occasioned by the war, there are included in the present accessions objects that were included among the finds of the seasons of 1916–17 and 1917–18. Of these remains the most interesting is a remarkably well-preserved sledge, ceremonially buried within the outer enclosure wall of the pyramid of Sesostris I (1980–1935 B.C.) and used to carry the king's statue in the funeral procession. New purchases include: an obsidian implement of the early dynastic period, a gold signet ring, three gold rings, two gold bracelets, a pair of gold ear-rings belonging to Graeco-Roman times, a series of glass vessels and lamps of the Roman period, five papyri, four Coptic and one Greek.

Excavations in Egypt and Ethiopia, 1922–25.—In *B. Mus. F. A.*, XXIII, 137, pp. 17–29 (30 figs.), G. A. Reisner reports on the results of excavations in Egypt and Ethiopia for the years 1922–1925. The cemeteries of the family of Meroë gave up some very important finds in the work there resumed in 1922, among which were between five hundred and six hundred scarabs together with rich gold ornaments, necklaces, bracelets, and ear-rings. At Semna the work was begun early in 1924 and included the excavation of the two forts, and the cemeteries of their garrisons, together with the recording of the inscriptions on the rocks on both banks. The excavation of the fort at Semna gives the plan and structure of one of these Egyptian strongholds. Later in 1924 work was resumed in the cemetery of Cheops east of the First Pyramid of Giza. Here, where the pyramid temple ruins of Cheops, the pyramids of the three queens of Cheops, and rows of mastaba tombs suggested a date *ca.* 3000 B.C., the excavations disclosed that the northern tomb of each row was an unusually long structure produced by joining two ordinary mastabas end to end and covering them with limestone to make one mastaba. The southern half of each of the double mastaba regularly was reserved for the husband and the northern half for the wife.

Recent Discoveries at the Giza Pyramids.—In *B. Mus. F. A.*, XXIII, 136, 12–14, (fig.), appears a brief report of the excavations by the Museum expedition in the area east of the Cheops Pyramid at Giza. The work exposed the foundations of the entrance hall of the temple of Cheops, and also tombs of priests of the pyramids who lived during the Fifth and Sixth Dynasties. Of these tombs, two proved very interesting. They are that of Qa'ar and his son Iduw. The tomb of Qa'ar was found in December, 1924; that of Iduw in January following. In the tomb of

Iduw was a figure, from the waist up, life-size, representing him as emerging from the floor, which is to say, as coming up from the underground burial chamber.

The "Teaching of Amen-em-ope" and the Book of Proverbs.—In 1923 E. A. W. Budge published an Egyptian hieratic papyrus, dating from about 1000 B.C., and containing a collection of proverbs. He himself called attention to the resemblances of some of these to sayings in the Book of Proverbs. This idea was developed by A. Erman in *Or. Lit.*, 1924, No. 5, and in *Sitzungsber. d. Preuss. Akad. d. Wiss., Phil.-hist, Kl.*, XV–XVI, 1924, pp. 86 ff., and by H. Grimme, in *Or. Lit.*, 1925, No. 2. The whole matter has now received an exhaustive investigation by H. Gressmann in *Z. Alttest. Wiss.*, XLII, 1924, pp. 272–296. He finds that the striking resemblances of the Hebrew proverbs to the Egyptian wisdom are limited to the appendix to the first collection of "Proverbs of Solomon" (Prov. 10: 1–22: 16) in 22: 17–24: 34. This contains exactly thirty proverbs, and the Egyptian collection is divided into thirty sections. Gressmann holds that this particular section is directly dependent upon the Egyptian original, and that it was borrowed in the period of the later monarchy, which implies that the collection of "Proverbs of Solomon" to which it is appended was made still earlier.

Walter Wresinski, *Atlas zur Altägyptischen Kulturgeschichte*, Leipsic, 1923. This monumental work contains 424 plates of photographic reproduction of Egyptian reliefs, frescoes and other works of art. The photographs were taken for the most part by the author himself, who has spent an immense amount of time and strength in visiting the monuments in Egypt and the numerous museums in Europe. Most of the material is inaccessible, except in rare and expensive publications that are unreliable, since they contain drawings rather than photographs; and many of the objects have never been published before. The atlas furnishes a welcome and much needed apparatus for the study of the history of Egyptian art. The first hundred plates are accompanied with thorough descriptions and discussions. The later plates, on account of the ever-increasing cost of publication, have only brief descriptive titles. An appendix with fuller discussion of the plates, chronological arrangement, and index is promised by the author.

BABYLONIA AND ASSYRIA

Excavations at Susa.—A severe arraignment of the untrustworthiness of the operations of the French Délégation en Perse at Susa and of its publication in the *Revue d'Assyriologie*, XIX, No. 3, 1922, of the results of the campaigns of 1914, 1921, and 1922, as well as of the restoration of the glazed-tile wall decorations in the Louvre, is published by W. Andrae in *Arch. Anz.* 1923/24, pt. 1 (cols. 95–106). He thinks that for want of expert supervision a great part of the remains of walls of sun-dried brick was destroyed without being recognized, and that the published plans are more or less imaginary; hence it is impossible to study or understand their surprising resemblance to parts of the plan of the citadel of Babylon.

The Fall of Nineveh.—The tablet lately published by C. J. Gadd, that records events of the tenth–seventeenth years of Nabopolassar and the capture of Nineveh, is made the theme of an elaborate historical study by J. Lewy in *Mitt. Vorderas. Ges.*, XXIX, 1925, pp. 1–90. He makes several important emendations in Gadd's transcription and translation, and discusses: the migration of the Cimmerians and Scythians and the campaign of the Babylonians, Medes, and Scythians against Assyria in 616–612, the partition of Western Asia in the peace of 584, the date of the battle of Megiddo and the Neo-Babylonian-Jewish synchronisms in the O. T., the battle of Carchemish and Nebuchadnezzar's first expedition to Palestine in 606, the deposing of Jehoiachin and the appointment of Zedekiah in 597. The campaign of the Scythians in Syria in 592–591, Judah in the wars of 609–586.

This is accompanied with a transcription, translation, and philological commentary to the Nabopolassar chronicle.

The Old Babylonian List of Kings.—In 1923 S. Langdon published two new tablets of the Weld-Blundell Collection of the Ashmolean Museum at Oxford that supplement and determine the order of the fragments of dynastic lists previously published by Scheil, Poebel and Legrain. H. Zimmern in *Z. D. Morgenl. Ges.*, LXXVII, 1924, pp. 19–35, subjects the list to an elaborate investigation and sums up the historical results that are to be gathered from it. The Babylonian originals of Berosus's list of kings before the flood may now be reconstructed precisely, and all previous attempts at reconstruction are shown to have been incorrect. The two Babylonian lists and Berosus differ widely in regard to the order of the names of the antediluvian kings, in regard to their number, and in regard to the lengths of their reigns. This shows that there were already different recensions of the list in Babylonia in the third millenium B.C. The relation of the list to the two lists of antediluvian patriarchs in Genesis still remains to be worked out. The enormous length of the reigns assigned to these kings shows that speculations in regard to world ages did not begin with the Greeks or the Hindus, but went back to Sumerian Babylonia. A convenient table is given of all the twenty-one dynasties covering the period from prehistoric times to the dynasty of Isin.

SYRIA AND PALESTINE

BYBLOS.—The Tombs of the Kings.—In *Syria*, IV, 1924, pp. 334–344; V. 1925, pp. 135–137, P. Montet and E. Dussaud give an account of the sepulchers of the early kings of Gebal (Byblos) discovered by them at modern Jebeil. Four of the tombs are contemporary with the Middle Egyptian kingdom (*ca.* 2000 B.C.). The inscriptions on these are in Egyptian hieroglyphics, and the royal names are in cartouches, quite in Egyptian style. A fifth tomb dates apparently from the time of Ramses II since it contained an alabaster vase bearing the name of this monarch. This tomb contained a magnificent sarcophagus. On the cover there are two lions and two profiles of the king. The ends represent four dancing women. On one side the king is depicted, seated upon a throne, and holding a cup and a lotus blossom, and receiving the offerings of attendants. On the other side only the attendants are depicted. The sarcophagus is supported by four lions. It bears a Phoenician inscription reading: "This sarcophagus Ippis-ba'al, son of Aḥî-rôm, king of Gebal, has made for Aḥî-rôm, his father, for his eternal sleep. And these were kings among kings, and princes among princes, and they perfected the army for Gebal. If any one shall uncover this sarcophagus, may his scepter be broken, may his rule be overthrown, may peace forsake him in Gebal; and may he himself, if he deletes this inscription, be carried into captivity." If the inference from the presence of the vase of Ramses II in the tomb be correct that this inscription belongs to the thirteenth century B.C., it is of extraordinary interest as two centuries older than the oldest Phoenician inscriptions hitherto known, and it has an important bearing on the problem of the antiquity of the alphabet. See also L. H. Vincent, *R. Bibl.*, XXXIV, 1925, pp. 161–193, 8 plates, with good photographs of the sarcophagus and inscription; also H. Gressmann, *Z. Alttest. Wiss.*, XLII, 1924, pp. 349–351.

Figurines of Ashtart.—In *Z. D. Pal. Ver.*, XLVII, 1925, pp. 3–4, E. Pilz discusses the origin and earliest forms of these figurines, the various types of foreign influence, Egyptian, Babylonian, Cretan, and Hittite, to which they have been subjected in the successive periods of Palestinian history, and their persistence into the first millenium B.C., in spite of the opposition of the monolatrous religion of Yahweh.

GIBEAH.—Final Report on the Excavations.—In the *Annual of the American*

Schools of Oriental Research, V, 1924, pp. 1–89, pl. 33, W. F. Albright describes the results of the excavation of Gibeah, the residence of Saul, the first king of Israel, the modern Tell el-Fûl. The oldest fortress is Canaanite, and belongs to the thirteenth and twelfth centuries B.C. The masonry is of polygonal stones filled in with chips, similar to the oldest walls in Jerusalem. The second fort of the eleventh century is of superior workmanship and, in the opinion of the excavator, was the work of Saul. The site was unoccupied from the tenth to the eighth century, and in the seventh century a tower was erected on the ancient foundations. Finally in the Maccabean period another watch-tower was erected.

JERUSALEM.—Inscribed Jar-Handles.—The excavations at Jerusalem have yielded a large number of inscribed jar-handles that throw some light upon the moot question of the antiquity of these objects. In *Pal. Ex. Fund*, LVII, 1925, pp. 91–95, 1 plate, J. G. Duncan considers that few date earlier than 600 B.C., and all of these are later than the "To the King" type. A few, he thinks, go back to the Jebusite period, which has an interesting bearing on the problem of the antiquity of the alphabet in Palestine. See also W. F. Albright in *J. Pal. Or. Soc.*, V, 1924, part 1.

The Recent Excavations.—In *Pal. Ex. Fund*, LVII, 1925, pp. 8–24 (27 figs.), J. G. Duncan gives the fifth quarterly report on the excavation of the eastern hill of Jerusalem. This is supplemented by an article by the same author in *Z. Alttest. Wiss.*, XLII, 1925, pp. 222–244, on "Millo and the City of David." The statements of the O. T. and of Josephus in regard to earliest Jerusalem are confirmed in the following points: (1) The original settlement was on the S. E. hill. Here remains have been found going back to the Neolithic Age, while, on the other hand, thus far nothing ancient has been discovered on the W. hill. (2) Earliest Jerusalem was occupied by the Canaanite Jebusites. Canaanite pottery of all three periods of the Bronze Age from 2500 B.C. to 1000 B.C. have been found in quantities. (3) Jerusalem was already strongly fortified when David attacked it. Walls of a very ancient type have been unearthed, built of great hammer-shaped, ill-fitting blocks, with large gaps between them which are filled up with chips. In these walls potsherds of the second and third periods of the Bronze Age were included. (4) The city consisted of two parts, an upper and a lower, and in the lower city there was a citadel. The excavations have disclosed a double line of Jebusite walls with towers facing outward on the north wall, and inward on the south wall running across the hill from east to west. It is probable that the space between these walls was the citadel, and that the lower city lay south of this and the upper city north of it on the site of the later temple. (5) David gained access to the citadel through the *ṣinnôr*, or "water-course." This is plausibly identified with the Jebusite tunnel which is cut through the rock from the lower city to the spring of Gihon. (6) David made a breach in the Jebusite wall, but subsequently refortified the city. The north Jebusite wall has been battered down, and subsequently a new wall has been built running diagonally from the N. W. corner of the southern wall to the N. E. corner of the northern wall. In part this is superimposed upon the ruined Jebusite wall. (7) David and his successors built round about from Millo, "the filling." Since David filled up the space between the two Jebusite walls with his new wall, the Millo may be the term for the old Jebusite stronghold.

ASIA MINOR

A New Latin Economic Edict from Pisidian Antioch.—In *T.A.P.A.*, LV, 1924, pp. 5–20 (3 pls.), David M. Robinson reports on a very interesting and valuable inscribed stone discovered on May 25, 1924, at Yalivadj, the site of Pisidian Antioch, in excavations conducted by the University of Michigan archaeological expedition to Asia Minor, working in coöperation with Sir William Ramsay. The

stone, which is in three parts, measures 0.895 m. high, 1.25 m. wide, and 0.34 m. thick. One section contains twenty lines, another forty-four, and the third two. The whole inscription is almost perfectly preserved and is dated at about 93 A.D. The inscription in the first column gives the *cursus honorum* of Galerius Rusticus. The central column is very important because of the light that it sheds upon Roman economic and social history. Its contributions are outlined thus: (1) It identifies the husband of Nigrina mentioned by Martial. (2) It is an edict earlier than that of Diocletian which before this discovery was the oldest edict from the East. (3) It shows that there was profiteering such as turned the attention of the imperial government to the provincial towns. (4) It is the first known attempt to fix maximum prices by law. (5) It makes clear that there was a famine in the reign of Domitian. Professor Robinson's article gives the Latin text of the inscription, an English translation, and full commentary on the subject matter.

The Sculptures of the Mausoleum.—At the Feb. (1923) meeting of the Berlin Archaeological Society, K. A. NEUGEBAUER called attention to much neglected evidence, especially in the unpublished fragments in the British Museum, for the division of the work on the Mausoleum between the four sculptors, Scopas, Timotheus, Bryaxis, and Leochares. (*Arch. Anz.*, 1923/24, pt. 1/2, cols. 111–113.)

GREECE

Archaeology in Greece, 1922–1924.—A summary of recent work and discoveries in Greece and Asia Minor, down to August, 1924, by A. M. WOODWARD, continuing that by A. J. B. WACE of three years before, is published in *J.H.S.*, XLIV, 1924 (pp. 254–280; 7 figs.). He gives the more important results of new or resumed excavation or study by the American School, in Argolis (Zygouries near Cleonae, Phlius, Nemea), on Mt. Hymettus, at Sardes and Colophon; of the British School, at Mycenae and Sparta (a large inscribed well), in Macedonia and at Cnossus (frescoes and earlier remains under all parts of the palace, connections with Egypt and Africa); of the French School, at Delphi (very early cult of the Earth Mother, later Athena), Delos, Thasos (choragic monument with statues of Dionysus, Tragedy, Comedy, Dithyrambus, and Nykterinus), Philippi, Gallipoli (settlement strata in the "Tomb of Protesilaus"), and at Mallia in Crete (inscriptions in the earlier linear script); by a Czecho-slovak expedition in Samothrace and a Swedish mission at Asine, on the coast of Argolis, both under the auspices of the French School; by members of the German School, in Athens (Acropolis, Theatre, Olympieum), at Aegina and Olympia; by the Greek Archaeological Society, on the Parthenon (reconstructing the northern colonnade), at Sunium, Oropus, Thebes, in Thessaly, and on Byzantine churches in various places; by the Italian School, on the south slope of the Acropolis of Athens (prehistoric settlement ending in neolithic times), on the island of Cos, and at Afrati, ancient Arcadia, in Crete) local pottery with survival of Minoan motives on Geometric and later shapes).

Exhibition Illustrating Greek Athletics.—In *B. Metr. Mus.*, XX, 2, 1925, pp. 45–46 (fig.), CHRISTINE ALEXANDER describes an exhibition arranged by the Museum to convey a graphic idea of Greek athletic activities through the medium of about seventy photographs taken from vases, sculptures, and coins supplementing a few originals and casts.

White Lekythoi.—In *B. Metr. Mus.*, XX, 2, 1925, pp. 48–50, (4 figs.), GISELA M. A. RICHTER describes nine new white lekythoi (two very fragmentary) recently acquired by the Museum. All belong to the second half of the fifth century B.C., and probably were found near Athens. On six of the vessels are shown the usual representations of mourners at the grave. The warped shape of one of the vases sheds light, it is argued, on a technical point, in that the vessel was apparent-

ly broken after the original firing and the warping resulted when it was thrown upon the funeral pyre, where such vases were hurled after the libation.

ATHENS.—The German excavations of 1921 near the monument of Lysicrates show that on the side of the Street of Tripods towards the Acropolis there was a row of monuments 4 m. to 6 m. apart. Foundations of three hitherto unknown monuments were uncovered. No traces of monuments earlier than the fifth century were discovered. On the opposite side of the street no excavations were made, but it is probable that, in view of the steep grade, there were no buildings here.

Lack of funds has prevented the Greek Archaeological Society from excavating the Odeion of Pericles, found by Kastriotis in 1913–1917. But slight excavations have determined the approximate site of the entrance to the precinct of Dionysus. The southern boundary wall has been uncovered at its eastern end, and shows that the precinct at this point was considerably above the ground level. The propylon must have been located where the difference in levels is least, that is, opposite the Old Temple. Apparently the eastern approach to the theatre was a ramp, leading in front of the propylon between the Odeion and the precinct to the eastern parodos (G. Welter, *Die Tripodenstrasse in Athen; Ath. Mitt.*, XLVII, 1922, pp. 72–77, cf. p. 26; 1 pl., 2 figs.).

PHILIPPI.—Nemesis and Nike.—In *B.C.H.*, XLVIII, 1924, pp. 287–303 (5 figs.), Fernand Chapouthier publishes two reliefs found in the theatre of Philippi, during the French excavations in May, 1923. These reliefs were dedicated by a certain M. Velleius Zosimus, priest "of the invincible Nemesis": one bears an image of Nike, the other of Nemesis, who is represented without wings. Both bear dedicatory inscriptions, the letter forms of which suggest a date in the second or third centuries A.D. Each inscription is translated, and a commentary appended. The reliefs have no artistic value, or historic significance, but are of extreme importance in the study of the history of religion, and show the close association of the worship of Nemesis and Nike, a relationship that seems to date from the end of the Hellenistic period. The former cult, celebrated to any extent in the classical period only at Smyrna and Athens, seems, at the end of paganism, to have had a great renewal of vitality, and exerted considerable influence, especially in Lower Egypt, Thrace, and Rome. The goddess absorbed the worship of Tyche, Themis, and Elpis, whose attributes (the wheel, the balance, and the palm-branch respectively) she took over. In Ephesus there is inscriptional evidence that she had taken over the cult of Nike as well; but these two reliefs show that at Philippi they were still regarded as two separate divinities. There are two types of Nemesis, the winged and the wingless, the winged being the later of the two. In that type the writer believes that Nemesis has absorbed Nike, the wings being the attributes of that goddess that she has taken over. When the two deities are regarded as distinct, as here, Nemesis is always wingless. The epithet "invincible," inscribed on both of these reliefs, is found here for the first time, and shows the close association of Nemesis and Nike. The guild of hunters, in whose name the reliefs were set up by the priest Zosimus, have been proven by the excavations to have been connected at Philippi with the games of the amphitheatre. These objects represent the step immediately before the final absorption of Nike by Nemesis.

Sophocles, not Solon.—Document No. 4 in the exchange of amenities between Th. Reinach and F. Studnitzka on the subject of the Lateran "Sophocles," is published in *J.H.S.*, XLIV, 1924 (pp. 281–285). The German scholar once more asserts as proven the existence in ancient times of two portrait types of the poet, derived from the statues set up by Iophon, his son, and by Lycurgus, and considers this a sufficient explanation of the difference between the Lateran head and the inscribed herm of the Vatican.

The Triton Pediment of the Acropolis.—At the March (1923) meeting of the

Berlin Archaeological Society, A. Brueckner discussed R. Heberdey's reconstruction of the Triton pediment in his *Altattische Porosskulptur*, and added his own interpretation of the character of Triton as the triple embodiment of the primitive powers of earth, sea, and air, as well as of the three ages of man, youth, maturity and old age, and one of the hecatoncheires, guardians of Zeus along with Briareus-Aegaeon (*Il.* A, 405), Cottus and Gyas (*Theog.* 735), who kept watch over the vanquished Titans in Tartarus. (*Arch. Anz.*, 1923–24, pt. 1/2, cols. 113–115.)

ITALY

Roman Portrait of the Second Century A.D.—In *B. Mus. F. A.*, XXIII, 135, p. 1 (fig.), is given a brief description of a recently acquired Roman portrait of the age of the Antonines. Perhaps it is a representation of the youthful Marcus Aurelius, with thick, curly hair and incipient mustache. The white marble of which the piece is made is of exceptionally beautiful grain and translucency.

Roman Sarcophagus.—In *B. Metr. Mus.*, XX, 3, 1925, pp. 77–80, (3 figs.), Gisela M. A. Richter reports on a Roman sarcophagus recently purchased by the Metropolitan Museum. It illustrates Roman funeral sculpture at its best. The lid, however, is missing. The scene decorating the front face is the oft-depicted story of Selene and Endymion. The sarcophagus is assigned to the first half of the second century of our era. Special importance attaches to these sarcophagi because they show the sculptor's skill in handling planes and in thus giving the effect of the third dimension, and also give evidence of his strong interest in landscape representation.

CASERMA.—Santa Maria Di Capua Vetere.—A Mithraeum.—In *Not. Scav.*, XXII (1924), pp. 353–375, A. Minto gives an account of an interesting Mithraeum, discovered in September, 1922, at Caserma in the district of S. Erasmo. It was one of a series of subterranean structures near the ancient Capitolium of Capua. It consists of a crypt and a cryptoporticus serving as a vestibule. The former is decorated with a number of interesting frescoes, representing Luna, Oceanus and Terra, the rising and setting Sun, and scenes of initiation. There is also a striking painting of Mithras slaying the bull, which dates from the beginning of the second century of the Empire.

CASTIGLIONCELLO.—In *Not. Scav.*, XXII (1924), pp. 157–178, E. Galli gives an account of discoveries on this Etruscan site and of articles preserved in the local museum. These came from an extensive necropolis, which was in use from the fourth century before our era until the beginning of the Roman Empire, and an adjoining sepulcretum of the Roman period. The necropolis belonged to an important port, to which the name of Vadum Volaterranum may perhaps be given. The most interesting objects are a fine alabaster urn, dedicated to Velia Carnei, on which the rape of Helen is represented, and a cylindrical altar of peculiar construction and decoration, which Galli believes to have been an altar to Robigus or Robigo.

COMACCHIO.—In *Not. Scav.*, XXII (1924), pp. 279–322, A. Negrioli gives a provisional account of the campaigns of 1922 and 1923 in the vast sepulcretum in the Trebbia valley. Some two hundred and twenty-one tombs were examined, containing objects dating from the first half of the fifth century B.C. to the second half of the fourth. These included vases with Etruscan inscriptions and some very fine vases of glass-paste.

ESTE.—In *Not. Scav.*, XXII (1924), pp. 269–278, A. Callegari discusses the figured "situla Randi" in the Museum at Este. Contrary to the opinion of Ghirardini (*Bull. Pal.* 1923, p. 160), he considers the situla to be of native workmanship, of very great excellence, and dates it soon after the first half of the sixth century before our era.

FELTRE.—At Feltre in the Venetian Alps, during the construction of various public buildings, there have been found, about 2 m. below the street level, architectural, artistic and other fragments. An altar of local limestone bore an inscription to Anna Perenna, the first of its kind that has ever been found. T. Campanile, who publishes these finds in *Not. Scav.*, XXII (1924), pp. 149–157, adds a brief review of the records of discoveries at Feltre from 1493–1915.

ISOLE DEL QUARNERO.—In *Not. Scav.*, XXII (1924). pp, 121–148, C. Marchesetti gives an account, with a map and numerous illustrations, of palaeontological explorations on the islands of Veglia, Lussino and Cherso, near Pola in Istria. Important finds have been made in that locality during the past forty years, but political conditions have made reports upon them impossible. These finds include a large number of cyclopaean constructions, consisting of settlements on the hilltops, surrounded by strong fortification walls. The walls are sometimes circular, surrounding the height with a double ring, sometimes they are found on one side only, and sometimes there is a circular wall with a semi-circular addition. A number of small objects were found, both prehistoric and of the Roman period; among the former was a clay stamp, a so-called *pintadera*, 125 mm. in length, ornamented with four crosses surrounded by circles. A classification of the objects of interest in the museum at Ossero, the principal city of the islands, is added.

MONTECALVO VERSIGGIA.—At this place in Liguria remains of a Roman *villa rustica* have come to light, in which was an amphora with a hoard of three hundred and fifty-seven Antoniniani of Philip, Gallienus, Salonina, Claudius Gothicus, and others, and representing the mints of Rome, Antioch, and Mediolanum. (G. Patroni, *Not. Scav.*, XXII (1924), pp. 278–279.)

NETTUNO.—In *Not. Scav.*, XXII (1924), pp. 334–340, L. Iacono gives an account, with illustrations and plans, of three *piscinae* on the shore at Nettuno between Porto d'Anzio and torre d'Astura. They are of different form, but of the same general plan, consisting of large basins of different shapes, connecting with one another and with the sea outside. They vary in depth from three to five or six feet.

PAVIA.—In *Not. Scav.*, XXII (1924), pp. 265–268, G. Patroni records further finds of architectural fragments under the Corso Vittorio Emmanuele (see *Not. Scav.* 1923, p. 210), including a stumpy column or round pedestal in granite *in situ*.

PERUGIA.—In *Not. Scav.*, XXII (1924), pp. 322–328, E. Galli describes a tomb found at Mt. Fagetto, north of Perugia, with a stone door turning upon hinges. It consists of a single quadrangular cella, 1.25 m. by 1.12 m., and, in spite of its elaborate construction, contained very simple furniture. It was occupied by one person, whose ashes had been placed in a rough urn of travertine, with an Etruscan inscription.

SANT' ORESTE.—In *Not. Scav.*, XXII (1924), pp. 328–332, G. Bendinelli published three specimens of figured Faliscan kylikes, found at Sant' Oreste in a fragmentary condition and now in the Museo di Villa Giulia. He finds that all three are from the same workshop, one of the local potteries that flourished in the second half of the fourth century B.C., but that they differ in the time of their manufacture.

SICILY.—In *Rend. Acc. Lincei*, 135–145 (6 figs.), Lucia Morpurgo describes in detail a bronze cottabus statuette of Silenus found in Sicily near Naso (Messina), and now in the Museum of the Thermae. In its present state it measures 9 cm. in height. There are missing the right foot from just below the calf of the leg, the toes of the left foot, both forearms, the tail and an attachment of some sort at the top of the head. Some of these mutilations are intentional, for the right leg is cut down into a pivot for insertion in a base, and the break on the top of the

head has been rudely scratched to imitate the rest of the scalp. The arms and the left knee are raised high and the whole figure seems to be straining violently upward as if to meet the throw of the cottabus. Observing this violence of movement, coupled with an evident inability on the part of the artist to express this same motive in the immobile torso, Morpurgo attributes the work to the last decades of the sixth century or the first part of the fifth. He thinks it a product of Etruscan workshops which, like many other objects of export, may have had considerable influence on Greek art—an hypothesis which he admits would have been thought almost inconceivable a decade or two ago. In support of the statuette's Etruscan origin he compares other Italian and Etruscan works of art, including a strikingly similar Silenus (figs. 5 and 6) also preserved in the Museum of the Thermae (*num. d'inv.* 66126.).

SORRENTO.—Greek Sculptures.—In *Not. Scav.*, XXII (1924), pp. 375–384, A. Levi describes a group of Greek sculptures found in 1911 in the vicolo I Tasso (formerly via dell' Accademia). The statues, which are badly mutilated, represent Artemis mounted upon a hind, Selene, fragments of animals, the torso of a youthful Dionysus supported by a satyr, a male torso, and a bearded head of greater than life size. The base of the Artemis has the fragmentary inscription . . . . ἁδας ἀνέθηκ(ε) in letters of the third century B.C., and another of later date the word ῥηγίνων. They seem to be the work of a Greek sculptor influenced by Timotheus. The finds included a Roman portrait head of the time of Tiberius and a lead pipe with an inscription of an unusual kind.

VETULONIA.—In *Rend. Acc. Lincei*, XXXII, 247–251 (1 fig.), Ettore Pais treats of the Etruscan stele found in the acropolis of Poggio alla Guardia at Vetulonia and published in the *Notizie degli scavi*, 1895, p. 26, on which is represented a warrior with a double axe in his right hand and on his left arm a round shield which conceals his whole body. About three sides of the stele runs an inscription in Etruscan characters, of which the first two words *Aıles'*, *Eluskes'*, give the warrior's name. The monument dates back to the period of Etruscan art which shows earliest contact with Greek culture. Lattes, cited by Milani, regards the names *Eluskes'* as of Gallic origin and since *Avles'* is Etruscan, he thinks this a proof of the mixture of Etruscan with Celtic or Celto-Umbrian blood. Pais however connects *Eluskes'* rather with the Elisykoi, a people whom Herodotus mentions in close connection with the Ligurians among the peoples composing the Carthaginian army defeated by Gelon of Syracuse in 480 B.C. This collocation can hardly be accidental, for in a fragment of Hecataeus of Miletus it is clearly stated that the Elisykoi were of Ligurian stock. Avienus too (v. 586 ff.) states that Naro (Narbo) was their capital. Pais admits that his hypothesis is uncertain, but thinks that as a result of the employment by Carthage of large mercenary forces from various parts of the world individuals from various lands often settled far away from their homes.

VIGNANELLO.—In *Not. Scav.*, XXII (1924), pp. 179–263, C. G. Giglioli continues the account of the excavations in the city and in the necropolis of this important place at the northern end of the Faliscan territory. Sixteen chamber tombs were found, with traces of twelve others. Three of these were published in *Not. Scav.* 1916, pp. 37–85, and an account of the remainder is given here. A great many vases and fragments of vases were found, Attic black- and red-figured, Apulian, Faliscan, Etruscan, and others. The article is fully illustrated with cuts and plates.

SPAIN

An Unknown Spanish Alphabet.—On coins of nine cities in the province of Cadiz, dating from the second century B.C., a unique alphabet is found. Some of the inscriptions are bilingual, containing Latin alongside of the native language.

From the proper names in these inscriptions, A. Schulten, in *Z. D. Morgenl. Ges.*, LXXVIII, 1924, pp. 1–18, has succeeded in working out the phonetic values of the signs. The characters resemble those of the Libyan alphabet, which is derived from the Phoenician. This alphabet, accordingly, is to be regarded as a worn-down form of the oriental alphabet. The language is not Iberian, on account of the presence of the letter *b*, which is lacking in Iberian. It is probably Tartessian, of whose writing and literature a mention of Poseidonios has been preserved by Strabo, 139.

GERMANY AND AUSTRIA

The German Archaeological Institute in 1921.—A brief report of the organization and work of the German Archaeological Institute for the year 1921 is given in *Arch. Anz.* 1922, 1/2, pp. ii-iv. Among the important appointments were those of W. Amelung to the direction of the Institute at Rome, of E. Buschor to that of the Institute at Athens, of G. Rodenwaldt to be General Secretary *vice* H. Dragendorff, called to Freiburg i. Br. In March, 1922, the Roman-Germanic Commission held its first meeting since 1916. The publication of "Germania" was continued, and a special atlas of illustrations was issued.

Trojan Symbolic Axes.—At the July (1923) meeting of the Berlin Archaeological Society, H. Schmidt gave a lantern talk on the show hatchets, a deposit of which was found in Troy II, 3, contemporary with the great treasure A, and belonging to the fully developed Bronze Age, about 2000 B.C. Although made of foreign materials, nephrite, *lapis lazuli,* and a green, jade-like stone, and highly polished, their form and decoration are derived from the Stone Age, especially the stone battle-axes of the north-European-Baltic culture, while in Troy II, which is of the Stone-Bronze transition period, similar forms were in common use. In Troy the show axes were doubtless used on ceremonial occasions as symbols of authority, an intermediate stage between the every-day use and the religious use found among the Hittites. *Arch. Anz.*, 1923/24, pt. 1/2, col. 123.

WELS.—The Roman Town of Ovilava.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, Beiblatt, cols. 345-424 (13 figs.), F. Wiesinger reports upon the excavations carried on by himself and K. Wolf at Wels in Upper Austria. Considerable portions of the town walls of the Roman Ovilava were uncovered, and many minor antiquities found. These included lamps, coins (ranging from Augustus to Honorius) and many pieces of inscribed *terra sigillata.*

BULGARIA

Ancient Coins Restamped by Seuthes III.—In *Bulletin de l'Institut archaéologique bulgare*, II (1923–24), pp. 174–186, N. A. Mouchmoff discusses seventeen coins of Lysimachos, Cassandros, and Alexander the Great which the Thracian king Seuthes III restamped with either his own representation or that of the head of Zeus.

Antique Monuments from Bulgaria.—In *Bulletin de l'Institut archaéologique bulgare,* II (1923–24), pp. 69-82, G. I. Kazarow lists a considerable number of new fragments from Bulgaria, especially fragments of marble reliefs from a sanctuary of the Thracian Knight near Vidin.

BACHKOVO.—A Mural Decoration in the Funeral Church of a Monastery.—In *Bulletin de l'Institut archaéologique bulgare*, II (1923–24), pp. 1–68, A. N. Grabar discusses the mural decorations of the funeral church erected by a Byzantine official of Georgian descent, Gregorios Pakuryanos. The frescoes are well preserved, and can be dated by indications in the records of the Monastery as coming from the second half of the twelfth century. They are surprisingly good in quality and show connection with the better works of the second Renaissance, as Daphne. There is in them a sense of proportion and of rhythm which is lacking in later

works. In substance they are not unusual except for the vision of Ezekiel on the west wall of the crypt. As a whole they form an important collection and their difference is shown by the few late frescoes which were added to the chapel in the fourteenth century.

BAYLOVO.—An Ancient Necropolis.—In *Bulletin de l'Institut archaéologique bulgare*, I, 1 (1921–22), pp. 68–85, R. POPOV presents an account of the contents of the different graves found in a prehistoric cemetery at Baylovo near Sofia. From the fibulae, some of which seem local types, it appears that the cemetery dates from the late Hallstadt period. It is also suggested that the potter's wheel reached Bulgaria about the same period as it reached Italy, in the first millenium B.C.

KOMAREVO.—Ruins of a Fortress.—In *Bulletin de l'Institut archaéologique bulgare*, I, 2 (1921–22), pp. 206–215, A. IGHNATIEFF gives an account of extensive ruins of a fortress near the village of Komarevo and conjectures that it is the fortress Goloe mentioned by Anna Comnena and other Byzantine authors, which played a prominent rôle in the Bulgar-Byzantine wars. The ruins have not been thoroughly studied, but among the objects found are many which date from Roman times as well as from later periods.

New Bulgarian Coins with the Two-headed Eagle.—In *Bulletin de l'Institut archaéologique bulgare*, I, 1 (1921–22), pp. 61–67, N. A. MUSHMOV describes some coins recently found in Bulgaria bearing the two-headed eagle and the initials TR and YP and concludes that these coins were issued by George Terter I (1279–1292), whose coins were hitherto unknown.

Notes on the Translation of the Chronicle of Manasses.—In *Bulletin de l'Institut archaéologique bulgare*, II (1923–24), pp. 137–173, J. TRIPHONOW discusses the three chief copies of the Bulgarian translation of the Chronicle of Manasses, and finds that it was probably made about 1336–8, the oldest copy being the copy of Tulcea, then that of Moscow, and finally that of the Vatican. He also finds that some of the miniatures were of Bulgarian origin in the Vatican manuscript and suggests that we have here evidence of a native Bulgarian school which flowered in the reign of Alexander.

PLOVDIV.—Discoveries from an Ancient Necropolis.—In *Bulletin de l'Institut archaéologique bulgare*, I, 1 (1921–22), pp. 41–60, B. DYAKOVICH gives an account of the excavation of Roman graves in the year 1921 at two places in Plovdiv. The first of these was south of Djambaz-Tepe, where a piece of Roman mosaic was found. The others, apparently of somewhat later date, were found on the slopes of Bunardjik. The dates of these graves were established by coins as running between the second and fourth centuries A.D., but there were few objects of importance found in them. The chief items were a bronze mirror representing the youth of Dionysus, a terra cotta statue of Venus, and a gold amulet of oblique form.

Hallstadt and La Tene fibulae in the Archaeological Museum of the National Library.—In *Bulletin de l'Institut archaéologique bulgare*, I, 1 (1921–22), pp. 31–40, B. DYAKOVICH describes and pictures several fibulae of different periods found at various spots in Bulgaria and now in this Museum of Plovdiv.

Prehistoric Explorations in the Plain of Vratsa.—In *Bulletin de l'Institut archaéologique bulgare*, II (1923–24), pp. 99–136, R. POPOW describes various objects found by excavations of tumuli in the plain of Vratsa and shows that the site was inhabited during the Neolithic, Hallstatt, and La Tene periods. Some of the Hallstatt fibulae differ from the Certosa type, and seem to come from a type which developed in Thrace. The Hallstatt remains suggest also that during this period there was no essential difference between Illyrian and Thracian culture. In this Thracian type the back of the fibula continues at the end up and to the right. There does not seem to be anything especially new from the La Tene remains as previously known in Bulgaria.

Prehistoric Skulls from Bulgaria.—In *Bulletin de l'Institut archaéologique*

bulgare, II (1923–24), pp. 187–201, Kr. Drontschilow describes five prehistoric skulls found near Ruse (Ruschuk) in northern Bulgaria, which seem to come from the Stone-Copper Age and date from the end of the third or the beginning of the second millenium B.C. The two female skulls are brachycephalic. One masculine skull is typical of *homo mediterraneus!* The other is of greater size and seems to show the influence of the northern type.

PRESLAV.—Old Aqueducts.—In *Bulletin de l'Institut archaéologique bulgare*, Yurdan S. Gospodinov (J. S. Gospodinoff) describes six aqueducts near the city of Preslav which date from the first Bulgarian Empire, the longest of which, the Ghertsa or Kuntia, is nearly 2 km. in length.

Silver coins of Assen II and George I Terter.—In *Bulletin de l'Institut archaéologique bulgare*, I, 2 (1921–22), pp. 177–185, N. A. Mushmov (Mouchmoff) considers some recently discovered silver coins which give us knowledge of the silver coinage of these two rulers, and concludes that we now know the silver and copper coinage of all the Bulgarian kings from Assen II to Ivan Shishman, with the exception of the silver coinage of Constantine Assen.

SOFIA.—Relief with Circus Games.—In *Bulletin de l'Institut archaéologique bulgare*, I, 1 (1921–22), pp. 21–30, Ivan Velkov calls attention to a relief found in 1920 near the Church of St. Nedelia in Sofia, in the ruins of an old building. It was broken into twenty-three pieces, but seems to have been a marble plaque (0.77 m. long, 0.59 m. broad and 0.025 m. thick). It is covered with reliefs which represent a provincial circus, probably from the fifth century A.D. There is a typical circus master with a Phrygian cap, marionettes in masks, and, on the left, figures inviting the public to enter. There are statues of Aphrodite and Serapis in the background. These games spread through the Balkans in the fourth to the seventh century, and became very popular.

TRAPEZITSA.—Mosaics.—In *Bulletin de l'Institut archaéologique bulgare*, I, 2 (1921–22), pp. 163–176, Kr. Miateff calls attention to the fragments of mosaics found in Church No. 5 at Trapezitsa and dating apparently from the end of the twelfth or the beginning of the thirteenth century. We cannot identify or reconstruct the subjects but the fragments give us interesting information on the methods of construction. Thus there are two layers of cement, the lower 3–4 cm. in thickness and made with straw, the upper of 1 cm. in thickness and without straw. The artists did not make preparatory sketches on the cement, but the spots which have been found on the cement seem to come from a rapid sketch in two colors, red-orange and gray, made to reinforce the contours of the work and to prevent white from showing through in the openings of the blocks, which are of different sizes and colors.

Two Newly Discovered Roman Military Diplomas of Vespasian.—In *Bulletin de l'Institut archaéologique bulgare*, II (1923–24), pp. 83–98, Iw. Welkow records two newly discovered Roman military diplomas, both issued by Vespasian. The first can be dated Feb. 7, 78, in the consulate of L. Ceionius Commodus and D. Novius Priscus, and relates to the troops of Sex. Vettulenus Cerialis, at that time located in Moesia. Many of the cohorts mentioned in it were formerly unknown. The diploma was found in the old *Castra et civitas Montanensium*, now Ferdinand. These are *Cohors I Cantabrorum*, *Cohors I Sugambrorum Tironum*, *Cohors VIII Gallorum*, *Cohors Cilicum* and *Cohors Mattiacorum*. P. Atilius Rufus is mentioned second in the list of witnesses. There were several objects found with this diploma, among others, a bronze statuette of Venus drying her hair. The second diploma, found in Dalgodeltsi near Lom, dates from Feb. 9, 71, and is a copy of the imperial decree of that date now in Vienna. It relates to the Dacian veteran of the *classis Misenensis, Tutius Buti filius.* The diploma is incomplete.

NORTHERN AFRICA

CARTHAGE.—In *Rend. Acc. Lincei*, XXXIII, 81–88 (map), GIOVANNI PINZA presents briefly the results of researches made in order to locate exactly in the Carthaginian peninsula (which has somewhat the shape of a hide, *byrsa*, or which according to another interpretation of this word, formed an easily defended *fortress*) the ancient city and citadel of Punic Carthage. Controverting the ideas of Shaw and Beulé, he finds that this lay toward the south, between the so-called Lago di Tunisi and the Golfo di Tunisi. The extensive necropolis north of this region shows the oldest graves toward the south, with the interments in successive centuries extending further and further to the north. The whole matter will be presented more fully in the *Monumenti Antichi della Accademia dei Lincei.*

UNITED STATES

BOSTON.—A Buddhist Sculpture.—In *B. Mus. F. A.*, XXII, 132, p. 30 (fig.), A. K. C. describes a recently acquired fine example of stone sculpture of the Pala period, dated from the tenth or the eleventh century.

Egyptian Relief in Fogg Art Museum.—A recent acquisition of the Fogg Art Museum is a very beautiful Egyptian relief representing Pharaoh protected by the Hawk of Horus (Fig. 1). This piece of sculpture dates probably from the period

FIGURE 1. EGYPTIAN RELIEF: BOSTON

of Seti I, the nineteenth dynasty, the period of the famous series of reliefs at Abydos and is a fine example of Egyptian sunk relief, that is, the background has not been cut away as in ordinary relief. The relief is the gift of Dr. Denman W. Ross. It has been placed on the landing of the main stairway.

Peruvian Textiles.—In *B. Mus. F. A.*, XXII, 132, pp. 33–35, (4 figs.), G. T(OWNSEND) gives a brief account of a collection of fifty-eight pieces of woven, embroidered and dyed textiles found a few miles west of Lima or at Pachacamac,

and recently acquired by the Museum. The textiles are parts of garments of the dead or personal belongings buried with their bodies. The colors in these tapestries are very fine.

CHICAGO.—A Persian Figural Velvet of the Shah Abbas Period.—In *B.A.I. Chicago*, XIX, 1, 1925, pp. 2–5, R. M. Riefstahl describes a gift to the Art Institute of a large panel of polychrome velvet on gold ground. It is spoken of as

Figure 2. Bodhisattva: Chicago

"the most important and most sumptuous Persian textile fabric on record." Woven in the reign of Shah Abbas the Great (1587–1628), it reflects the magnificence of the great period of Persian art. Before the present acquisition no American museum possessed an example of the sixteenth century Persian fabrics to which this panel belongs, though a companion piece has recently been acquired by the South Kensington Museum in London, which, however, seems to be less well preserved. In various places in Europe a small total of eighteen such fabrics are recorded. The beauty of the panel is as noteworthy as its rarity. The subject represented occurs frequently in Mohammedan art. The design is that of

a graceful youth smelling a flower and dressed in flowing robes as he stands beside a cypress tree at the edge of a little pond which is wrought in silver thread. On the other side of the cypress tree the same figure is repeated, a composition that suggests the common oriental device of two genii on either side of the Tree of Life. The technique is very fine, and the shades are most brilliant.

Three Chinese Paintings.—In *B.A.I. Chicago*, XIX, 3, 1925, pp. 30–31 (2 figs.), C. F. K(ELLEY) calls attention to three Chinese landscape paintings recently added to the collections of the Institute. Two of them, silk kakemono, constitute a pair, a winter and a summer landscape. The third is a paper makimono, or scroll painting, and depicts a kind of continuous landscape panorama.

The kakemono were painted by an artist by the name of Hsia Kuei, flourishing about the middle of the fifteenth century, who patterned his work after the high order of landscape painting that was developed during the Sung Dynasty (960–1279). Landscapes in pairs have long been popular in Chinese and Japanese art.

The makimono is the work of Kung Hsien who dates from the end of the seventeenth century. It is an illustration from the school of Chinese artists called by the Japanese the "*bun jin* (literary men) school." Chinese literary men, writing with the brush, prided themselves on the clever use of this instrument.

Wooden Sculptures in the Buckingham Collection.—In *B.A.I. Chicago*, XIX, 5, 1925, pp. 54–57, (6 figs.), C. F. K(ELLEY) reports the acquisition by the Art Institute of the fourth Bodhisattva for the Buckingham Collection (Fig. 2), and describes it together with the five other sculptures of the collection, three Bodhisattvas and two Apsarases. All these pieces belong to the Sung Dynasty (960–1279 A.D.).

NEW YORK.—Chinese Bronze Sacrificial Vessel.—In *B. Metr. Mus.*, XX, 3, 1925, pp. 86–87, (fig.), S. C. B. R(EITZ) reports on a beautiful Chinese bronze of the Ch'in style recently acquired by the Metropolitan Museum. The cup is described as graceful in design and cast with the utmost care.

EARLY CHRISTIAN, BYZANTINE, AND MEDIAEVAL ART

GENERAL AND MISCELLANEOUS

Inscriptions and the New Testament.—At the Feb. (1923) meeting of the Berlin Archaeological Society, A. DEISSMANN discussed the direct and the indirect bearing of inscriptions on the text and interpretation of the New Testament and on the early history of Christianity, citing especially ossuary inscriptions from Palestine, Asia Minor, Egypt, Delphi, and Rome, and a number of inscriptions and ostraca which show that the name Jesus had no sacred character except through the worship of Christ. *Arch. Anz.*, 1923/24, pt. 1/2, cols. 110–111.

The Early Christian Basilica.—At the Nov. (1923), meeting of the Berlin Archaeological Society, H. LIETZMANN of Jena spoke on the *Corpus Basilicarum*, a work undertaken by the late-antique section of the Jena Archaeological Institute as a contribution of material for a final study of the late development of ancient art. It is a collection of all the published matter on Christian basilicas down to the Arab invasions, with ground plans reduced to a common scale and elevations, ornament, and building members given in detail. The work is divided geographically, and the section on Syria, by Beyer, was completed and soon to be published. Even here the subject falls into two parts because of a difference of building materials. Northern Syria, having an abundance of easily worked stone and forests of timber, used column supports and timbered roofs, while Central Syria, with only hard basalt rock, had to develop a complete system of arch support. The special Syrian feature of a band of ornament dividing the façade and running around doors and windows does not appear until after 400. It is fully developed in the basilica of St. Simon Stylites, the finest work of Northern Syria, erected

between 459 and 492. The Christian church, like the Jewish synagogue, was a development from the Hellenistic-Roman hall, and necessarily had at first a variety of local forms. What became the almost universal design, both in Syria and elsewhere,—a high-roofed nave flanked by lower aisles and ending in a semicircular apse,—was probably first adapted from secular buildings at Constantinople, and its rapid spread was due to the construction of churches on this model by imperial order in Rome, Jerusalem, Tyre, and other important centres from which it was copied with the natural local modifications. A thorough and systematic study of the remains of the smaller church of St. Paul at Rome, which are under the floor of the present basilica, and especially the fixing of its date, whether before or under Constantine, would be of great interest. It is known to possess the Syrian feature of two square sacristies next the apse, and the architect may have been Syrian. The origin of the square atrium in front of Constantinian buildings is yet unknown (*Arch. Anz.* 1923/24, pt. 1/2, cols. 125–129).

ITALY

VELLETRI.—In *Not. Scav.*, XXII (1924), pp. 341–353, G. Mancini tells of the discovery at Solluna, five kilometers south of Velletri, of an early Christian sepulcretum with some interesting inscriptions belonging to the end of the third and the beginning of the fourth century A.D. There are also some pagan inscriptions of an earlier date. One of these, recording a mixed equestrian and senatorial career under Claudius and Nero, shows that the office of *praefectus frumenti dandi* continued under Nero, contrary to the opinion of Kornemann and Rostowzew. Another inscription gives the career of a *redemptor intestinarius* of the first century, while another has the word *convictor* in the sense of one of those *qui uno epulo vesci solent.* One of the Christian inscriptions has the date in the form (*die*) *Nove*(*mbris*) *septima pos*(*t*) *decima,* which came into use in the fifth century. Just beyond the point on the Via Appia where this cemetery was found was the *mansio ad Sponsas*, which serves to locate the *mansio ad Tres Tabernas*, which was three miles distant. Nibby seems to have been right in placing the latter at Le Castelle.

GREAT BRITAIN AND IRELAND

LONDON.—Two Ivory Reliefs.—In *Burl. Mag.*, XLVI, 1925, pp. 93–94 (3 figs.) M. H. Longhurst publishes two small ivory plaques of the Crucifixion recently acquired by the Victoria and Albert Museum. One is unusual in iconography, representing Christ between Longinus and Stephaton, both of whom are nimbed. This ivory is very probably English of the tenth–twelfth century. The origin of the second relief is open to question. Stylistically and iconographically it appears more Continental than English, though no close parallels are to be cited among Continental examples. It is an oval reliquary or pectoral cross with the space between the splayed arms pierced and partly filled by medallions with symbols of the Evangelists.

UNITED STATES

NEW YORK.—An Early Christian Sculpture.—In *B. Metr. Mus.*, XX, 2, 1925, pp. 40–41, (fig.), Joseph Breck describes a recently purchased carving of an allegory of the Last Judgment depicted on the lid of a marble sarcophagus belonging to the fourth century. It is a fine example of Christian art, 90 ¼ in. in length, 16 in. in height, with a depth of only 2 ¾ inches. The rest of the lid was cut away. The sculpture formerly was in the Stroganoff Collection at Rome. Its style is typical of the degenerate Hellenistic art.

English Slipwares.—In *B. Metr. Mus.*, XX, 2, 1925, pp. 46–68 (3 figs.), C. Louise Avery reports on five splendid examples of English slipware recently

acquired by the Metropolitan Museum. Ware of this type in England probably dates from the time of the Roman occupation, though most of the kinds of which there are considerable remains belong to the seventeenth and eighteenth centuries. Thomas Toft is the name that appears on many of the earliest and best pieces. He presumably worked at Staffordshire.

Sculptured Decorations from the Church at Frias, Spain.—In *B. Metr. Mus.*, XIX, 10, 1924, p. 231, J. B(RECK) mentions the accession of numerous fragments from the sculptured decorations of the portal of the church at Frias, Spain. The work is dated as probably of the early thirteenth century. There are depicted twelve scenes from the life of Christ and three episodes from a monastic legend. Besides these there are representations of Vices, scenes perhaps from the romances of the day, animals, real and imaginary, foliage and other ornaments.

RENAISSANCE ART

ITALY

A Follower of Filippo Lippi.—In *Burl. Mag.*, XLVI, 1925, p. 230–235 (5 figs.), J. H. H. KESSLER identifies a Florentine painter of the second half of the fifteenth century who appears to be the direct product of the school of Fra Filippo Lippi. The starting point is an altarpiece of the Madonna and Child with Saints in the church of St. Dominic, S. Miniato al Tedesco. Hence the new artist is christened "the master of S. Miniato." Four other works show such close similarity to the altarpiece as to be definitely assignable to the same master. The finest of these is a Madonna and Child in the Rijksmuseum, tentatively ascribed to Pierfrancesco Fiorentino.

A Relief by Donatello.—Among the hitherto unknown reliefs by Donatello that W. v. BODE has recently discovered, he published the finest example in *Burl. Mag.*, XLVI, 1925, pp. 108–114 (3 pls.). It represents Christ in Glory, in the midst of floating clouds and worshiping and ministering angels, and adored by two donors below. It is one of the latest of Donatello's group of very low reliefs and one of the most unusual of his original treatments of a theme. The relief is small and in the form of a lunette, probably originally designed to go above the door of a large tabernacle.

RIMINI.—Newly Discovered Frescoes.—In *Burl. Mag.*, XLVI, 1925, pp. 3–4, 72–82, 133–134 (15 pls.), G. NAVE gives a brief description of the frescoes at Rimini recently restored with remarkable success by Giovanni Nave. The frescoes, covered over, had for the most part been forgotten until the earthquake of 1916 brought parts of them to light. The most important of them are the fourteenth century series of representations from the life of St. John the Evangelist and the life of the Virgin in the church of St. Augustine. These transcend the other known works of the Giottesque Romagnol painters and must be given a prominent place in all future studies of the school.

FRANCE

GRENOBLE.—A Portrait by Velasquez.—In *Burl. Mag.*, XLVI, 1925, pp. 120–127 (2 pls.), A. BREDIUS attributes to the early period of Velasquez a half-length portrait of a man in the Grenoble museum. It is there attributed to Herrera, though Mayer has lately attributed it to Mayno. For the Velasquez claim the 1622 portrait of the poet, Luis Gongora, furnishes the closest stylistic parallel.

HOLLAND

AMSTERDAM.—A Newly Discovered Nicolaes Maes.—In *Burl. Mag.*, XLVI, 1925, pp. 82–87 (fig.), C. HOFSTEDE DE GROOT publishes a painting of Grace

before Meat recently discovered by Douwes Brothers, Amsterdam. The same subject, an old woman saying grace, is treated in two well-known pictures by Maes, one in the Louvre and the other in the Rijksmuseum. The new one differs from the others in certain particulars, notably in the character of the woman represented and in the method of treatment. The new one is nearer the style of Rembrandt than are the others.

DEVENTER.—St. Leubin's Cup.—In *Burl. Mag.*, XLVI, 1925, pp. 140–143 (2 figs.), M. Conway discusses the so-called St. Leubin's ivory cup in the Broerenkerk at Deventer, as it appears without its fourteenth-century silver-gilt mounting. If the cup really belonged to St. Leubin, as tradition asserts, it dates from the eighth century.

SWITZERLAND

A Virgin by Memling.—In *Burl. Mag.*, XLVI, 1925, pp. 235–236 (pl.), P. Ganz ascribes a panel of the Virgin Enthroned between two Angels (in a private collection in Basle) to Hans Memling. It is probably even earlier than the Chatsworth triptych, which has hitherto been considered Memling's earliest known work. Even the smallest details of the new panel are dominated by the influence of Roger de la Pasture. Some motives, such as the garden and one of the buildings, are clearly derived from Roger's Annunciation in the Metropolitan Museum, New York. At the same time, nearly all the motives reappear frequently in Memling's later work, so that the authenticity of the picture can hardly be questioned. The picture confirms the belief that Memling was one of Roger's pupils.

ZURICH.—A Drawing by Raphael.—In *Burl. Mag.*, XLVI, 1925, pp. 135–139 (2 pls.), O. Fischel publishes a drawing in the portfolios of the Zurich Art Society which is now recognized as a study by Raphael for the Expulsion of Heliodorus. It belongs in the same group as the drawings for that subject in the Ashmolean Museum and probably came originally from the same collection.

RUSSIA

LENINGRAD.—Dutch Pictures in the Hermitage.—In *Burl. Mag.*, XLVI 1925, p. 47 (3 figs.), A. Pappé describes three hitherto unpublished Dutch paintings in the Hermitage: a portrait of a young lady by Terborch, one of his finest examples of this type, an old woman, by A. van Ostade, and a genre scene of The Village Doctor, by Jan Victors.

Landscape by Rembrandt.—In *Burl. Mag.*, XLVI, 1925, p. 245 (fig.), is reproduced an unfamiliar landscape by Rembrandt, formerly in the Stroganov collection, from which it recently passed to the Hermitage Gallery.

GREAT BRITAIN AND IRELAND

FAREHAM.—A Newly Discovered Botticelli.—A large painting of the Trinity with St. John the Baptist and Mary Magdalene, after being lost to art critics for some years, has come into the collection of Viscount Lee of Fareham and is published by Y. Yashiro in *Burl. Mag.*, XLVI, 1925, pp. 157–167 (4 pls.). With convincing reasons, the author identifies it with the famous lost altarpiece of Santa Elizabetta delle Convertite and dates it between the Berlin St. Sebastian (1473) and the Primavera (*c.* 1478). The predella of the Story of the Magdalene in the Johnson Collection, Philadelphia, is connected by the author with the Trinity painting. Size, style, and subject are in agreement with this assumption. Not all the work on these pictures was done by Botticelli. He directed the whole and himself painted the principal parts of the Trinity panel. An assistant worked with him, painting minor details, and in the predella, nearly the whole. This assistant is here identified with Berenson's "Amico di Sandro."

LONDON.—A Portrait by Fabritius.—In publishing the portrait of a Man in a Fur Cap, recently acquired by the National Gallery, C. HOLMES suggests in *Burl. Mag.*, XLVI, 1925, pp. 127–133 (fig.), the great possibilities that lie in a comparative study of the various Dutch schools and their influence upon each other. Carel Fabritius was an experimenter, who shows many influences. Metzu, of Leyden, began the study of light effects, which Fabritius, de Hooch, and Vermeer continued. Rembrandt was another source of inspiration and much was suggested to Fabritius by the Oriental art which became so important a factor in the design of Delft pottery. The Man with a Fur Cap shows many original characteristics, particularly the posing of the subject in the open air, enveloped in atmosphere. It is probably a self-portrait.

SWINTON PARK.—Paintings by Hals.—Two hitherto unpublished pictures by Hals, in the collection of Lady Cunliffe-Lister, are described by C. H. C. BAKER in *Burl. Mag.*, XLVI, 1925, pp. 42–47 (2 figs.). One, representing a man fingering his collar, is a companion piece to the National Gallery Lady with a Fan and probably dates about 1642. The other represents a preacher and is slightly the earlier of the two. The identity of the two sitters represented is not studied here.

Titian at Hertford House.—To Titian's Perseus and Andromeda, already much discussed and praised, P. HENDY, in *Burl. Mag.*, XLVI, 1925, pp. 236–240 (2 figs.), thinks another painting may be added to Titian's credit in the Wallace collection. It is L'Armour Piqué, a small canvas to which no author has been assigned. Titian's style clearly predominates the work. The dissenting feature is the unsuccessful treatment of the legs of the female figure. It is not Titian's draughtsmanship that is lacking, but rather his usual success in concealing bad drawing under good design. In other early works he has been wiser than to attempt the representation of legs in this manner.

UNITED STATES

Guillaume de Hellande's Tapestries.—In *Burl. Mag.*, XLVI, 1925, pp. 193–194 (pl.), G. L. HUNTER publishes three of the missing Guillaume de Hellande tapestries mentioned in a recent number of the *Burl. Mag.* They are now in the collection of Andrew W. Mellon, Secretary of the U. S. Treasury.

BOSTON.—French Gothic Altarpiece.—In *B. Mus. F. A.*, XXII, 131, pp. 21–24, (6 figs.), C. H. H(AWES) describes a recently purchased Gothic reredos or retable from a single block of limestone measuring nine feet by four feet by one foot and carved in high relief. The piece is assigned to the fourteenth century. Burgundian influence is traced in the technique.

The Ponte Vecchio by Canaletto.—In *B. Mus. F. A.*, XXIII, 136, 9–10, C. H. H(AWES) reports on a recently acquired and unusual painting by Antonio Canale (Il Canaletto), showing some old buildings along the Lungarno Acciajuoli which are depicted with strong feeling for decoration and good composition.

CHICAGO.—A Dutch Dwelling Room.—In *B.A.I. Chicago*, XVIII, 9, 1924, pp. 111–113, (fig.), B. B. reports a gift to the Museum of a completely equipped Frisian dwelling room of the seventeenth century, vividly and charmingly depicting the life of that period.

Eighteenth Century French Color Prints.—In *B.A.I. Chicago*, XIX, 3, 1925, p. 35, (fig.), MCKEE calls attention to the Art Institute's primacy among the museums of America in the field of eighteenth century color prints, and mentions the acquisition of a number of prints of importance for illustrating the life of their times, but especially noteworthy for their technical qualities.

Fragment of Limestone Relief of Arrest of Christ.—The Art Institute of Chicago acquired a sculpture representing the arrest of Christ and another fragmentary

scene, probably also from the Passion. The style is reminiscent of the thirteenth century and the drapery leads to the assignment of the work early in the succeeding century (*B.A.I. Chicago*, XIX, 2, 1925, p. 23).

The Walter H. Schulze Memorial Gallery of Paintings.—In *B.A.I. Chicago*. XIX, 1, 1925, pp. 7–9 (4 figs.), R. M. F. reports the gift to the Art Institute of a collection of fifteen modern American paintings, including works by several artists not hitherto represented. The pictures are chiefly landscapes, two marines, and a few figure paintings.

DETROIT.—Primitive Italian Majolica.—Though sixteenth-century Italian majolica is popular in American collections, the acquisition by the Detroit Institute of seventeen pieces from the fourteenth and fifteenth centuries is quite an innovation. W. Von Bode publishes these in *Art in America*, XII, 1924, pp. 239–244 (2 pls.), analyzes their style, and assigns them to the various schools of Orvieto, Siena, Faenza, Florence.

NEW YORK.—Bookbinding and Other Leatherwork.—In *B. Metr. Mus.*, XIX, 12, 1924, pp. 298–300 (3 figs.), J. B. gives an account of fine leather pieces recently acquired by the Metropolitan Museum, books, document cases, etc. The objects show impressively the use made of leather as a means of embellishing utilitarian articles.

Colonial American Wall-Paper.—In *B. Metr. Mus.*, XIX, 10, 1924, pp. 235–239, (4 figs.), R. T. H. H. reports the acquisition by the Museum of specimens of wall-paper used in the American colonies. This decorative device was employed in the generation before the Revolution. China and the Old World furnished the supply originally, but the industry of manufacturing the paper was apparently well-developed in this country before the end of the eighteenth century.

Early American Art.—In *B. Metr. Mus.*, XIX, 11, 1924, pp. 251–265, R. T. H. H. and C. O. C. describe the American Wing of the Metropolitan Museum opened to the public on November 11, 1924, which owes its being to the generosity of Mr. and Mrs. Robert W. de Forest. Here are assembled representative groups of the utilitarian arts, including furniture, metal-work, ceramics, glass and textiles, which are placed in settings produced by the painting and interior architectural woodwork of the period, thus giving the atmosphere of typical interiors of the seventeenth and eighteenth centuries. Great pains have been taken to secure historical accuracy in the furnishing and the equipping of the rooms. The finer textiles, wall coverings, and prints the colonials secured from abroad, while most of the furniture and architecture were designed and constructed in America. The authority for the scheme of the Wing, as this was in a measure determined from inventories, advertisements, and contemporary descriptions, is given in the *Handbook of the American Wing*.

European Silver.—In *B. Metr. Mus.*, XX, 3, 1925, pp. 69–72, (4 figs.), C. Louise Avery reports the Alfred Duane Pell Bequest to the Metropolitan Museum, consisting of a notable collection of European plate in which are comprised seven examples of the work of Paul Lamerie and fifty-six other pieces, divisible into fifty-two pieces of English plate, ten examples of Continental work, and one spoon of American manufacture. The most elaborate and pretentious of the pieces is a large silver-gilt cup with cover by Lamerie (Fig. 3), 1742, showing figures of the infant Bacchus, a satyr, and accompanying decorations.

Fans, Enamels, Ivories, Jades, etc.—In *B. Metr. Mus.*, XIX, 12, 1924, pp. 288–291 (3 figs.), J. B., S. C. B. R., and H. B. W. briefly describe a collection of more than five hundred works of art recently donated to the Metropolitan Museum. The list includes fans, enamels, ivories, jades, crystals, miniatures, paintings, and other works of art. Fine craftsmanship is displayed in the fans. The enamels consist of snuff boxes, scent bottles, thimble and needle cases, etc. There are twenty pieces of Wedgwood, several watches, seventeen ivory carvings, and

other articles. In the collection are also many excellent Peking enamels, porcelains, and fifty-four miniatures.

Islamic Pottery.—In *B. Metr. Mus.*, XIX, 11, 1924, pp. 265–267, J. B(reck) reports on three unusual pieces of early Islamic pottery, a mediaeval Spanish bowl and a Renaissance jar of Italian origin recently donated to the Metropolitan Museum. The earliest of the Eastern pieces is assigned to the eighth or ninth century. The ware of which it is an example, Sino-Iranian, resembles a type of Chinese pottery of the T'ang period (618–906), which served as the model for the Persian and Mesopotamian ware. The other Islamic pieces are later. The Spanish bowl is associated with the kilns at Paterna, where from the twelfth to

Figure 3. Lamerie Cup: New York
Reproduced by courtesy of the Metropolitan Museum of Art

the fifteenth century tin-enameled earthenware with painted decoration in manganese and green was produced in quantities.

Printed Fabrics.—In *B. Metr. Mus.*, XX, 2, 1925, pp. 53–55, (fig.), Frances Morris reports on cotton prints with historical subjects, among which are allegorical Washington prints, one of Penn's Treaty with the Indians, and a number of "event" handkerchiefs. The provenance of certain of the Washington prints is still to be determined. One was designed in England, but it is also known that others were produced in France.

Renaissance Bronzes.—In *B. Metr. Mus.*, XX, 1, 1925, pp. 3–4, (2 figs.), Joseph Breck describes a gift of twenty-five bronze statuettes of the fifteenth, sixteenth, and seventeenth centuries. The Renaissance tendency to produce small bronzes in the form of statuettes, medals, plaques, andirons, inkstands and other utilitarian objects is well illustrated in this group. The enthusiasm for antiquity was promoted by such figures, many of which were copies of classical statues represented in reduced size.

NEWS ITEMS FROM THE AMERICAN SCHOOL OF ORIENTAL RESEARCH IN BAGDAD

The American School of Oriental Research at Bagdad is just completing its second year of work—a year that has been, from a scientific point of view, very prosperous. The School began in a very humble way. It is housed for the present in the American Consulate in Bagdad. Our funds do not as yet permit us to place a permanent Director on the ground, but in order to insure continuity of policy Professor Barton, of the University of Pennsylvania, acts as Director, and an Annual Professor is sent to Bagdad each season. The School was opened at the beginning of November, 1923, with Professor A. T. Clay, of Yale, as Annual Professor in charge, Dr. Edgar L. Hewitt, Director of the American School of Archaeology at Santa Fé as Lecturer and Dr. J. L. Magnes as Research Associate. Two students were also enrolled. The work of the first season was devoted to archaeological study, travel and observation in Mesopotamia.

The Annual Professor for the year 1924–1925 has been Dr. Edward Chiera, of the University of Pennsylvania. Professor Chiera has had no students, but that in a way has been a scientific advantage, since the purpose of the School is not only the instruction of students but archaeological research as well. Professor Chiera spent the first four months of his stay in Babylonia in travel and archaeological observation. Some time was spent at Kish and at Ur, where excavations are in progress, and the archaeological science of excavation was learned. The Government of Iraq then asked Dr. Chiera to undertake for it a small excavation of the mound of Yaghlan Tappah, not far from the village of Tar Khelan, near Kirkuk. A number of cuneiform tablets of a new type had been found there, and the Archaeological Department of the Government wished to ascertain more of the nature of the civilization from which they came. It was thought that the proper names in them indicated a mixture of Assyrian and Mitannian races. During the first month of this excavation Dr. Chiera came upon a large palace of a private individual and found about seventy tablets. He then obtained permission to continue the excavation as an undertaking of our Bagdad School and during the month of April completed the excavation of this palace, finding in all more than one hundred tablets. The palace proved to be that of a rich man; the walls standing were eight or ten feet high; their foundations were of baked bricks, while the upper part was constructed of mud bricks. The faces of the wall were covered with mud plaster and around the bottom was a coating of bitumen. Above the bottom, the walls were whitewashed. The roof was flat, supported by small poles, and covered with reeds, over which was a rather thick stratum of clay—a type of roof still used in the region to-day.

The rooms were paved with mud, except the courtyard, which was about 25 x 30 feet, and fully paved with square bricks. Another room was paved with large bricks wider at one end than the other and dove-tailed into one another. Dr. Chiera found a number of types of pottery which he reports to be new. In his latest report he speaks of having discovered a dining-room of about 1200 B.C. containing a triclinium of the form familiar to us from Roman times.

Near the site of the palace which he excavated Dr. Chiera reports an extensive mound covering the site of a city, the beginnings of which date back to the Stone Age and which was long inhabited.

It has been conjectured that Kirkuk was the Arrapkha of the Assyrian inscriptions of the eighth century B.C., the Arrapachitis of Ptolemy. It is hoped that Dr. Chiera's discoveries will enable us to test this conjecture. Dr. Chiera has also begun a systematic archaeological survey of Babylonia which it is planned the School shall continue in the future.

Professor Raymond P. Dougherty, of Goucher College, will go to Bagdad as the Annual Professor for the year 1925–1926.

About five hundred volumes from the library of the late Professor Morris Jastrow, donated by Mrs. Jastrow, have already been sent to Bagdad, and two or three hundred from the library of the late Rev. Dr. John P. Peters, donated by Yale University, are awaiting shipment. The late Rev. Dr. William Hayes Ward bequeathed his scientific library to the Bagdad School, but it has not yet come into our possession. It is the intention of the management to make the School at Bagdad a laboratory where American scholars and students can find facilities for the study of the civilizations of that part of the world.

G. A. B.

June 5, 1925

NEWS ITEMS FROM THE AMERICAN SCHOOL IN JERUSALEM

It appears from Director Albright's reports that the School in Jerusalem has had a very successful year. There were ten regular students, and a large number of part-time students, including a group of seven American students who came to Palestine from a winter at the University of Edinburgh. The School was fortunate in having as its Fellow M. Harald Ingholt, one-time Procter Fellow at Princeton University, who a year ago was engaged in the French expedition at Palmyra. He is now engaged in editing the results of that expedition. In addition to their routine work both Director Albright and the Annual Professor, Dr. Max L. Margolis, were kept busy in their contributions to local archaeological problems, on which their advice was much sought. The year was signalized by the presence of a large number of academic men from American universities and seminaries who took part in the School's work.

The School has engaged in several trips. That in the fall went to Gaza, covering the intermediate country. In the early spring there were trips to southern Judaea and to Engedi and Masada. Accounts of these have been published in numbers of the *Bulletin* of the Schools. The long spring trip was taken to Northern Galilee and the Hauran, with the study of the Bronze Age Mounds as the special objective. The account of the results will appear in the October *Bulletin*.

It is expected that Nies Memorial Building will be finished this summer and ready for occupancy. This will fortunately forestall the greatly increased rental that we should otherwise have to pay for our present building. The first session of a Summer School will be held this summer. It is hoped to make this an annual event.

The Annual Professor for next year is Professor R. P. Dougherty, of Goucher College. Also Dean Badé, of the Pacific School of Religion, will be in attendance, and hopes to accomplish some excavations. Plans are on foot for excavating the ancient Kiriath-sepher.

Dr. Clarence S. Fisher has been added to the staff of the Schools, and it is believed with full assurance that his presence will greatly stimulate not only our own archaeological enterprises, but also serve the interests of all American institutions desirous of archaeological enterprise in the Near Orient.

J. A. M.

June 14, 1925

NEWS ITEMS FROM THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

The great archaeological excitement of the past months was the chance find, by fishermen in the Bay of Marathon, of a bronze statue of a youth. The work

is in an excellent state of preservation, except for surface encrustation, as only a small part of one foot and the object (patera?) held in the left hand, are missing. The figure is about two thirds life size, representing an ephebe, standing, with left hand held slightly forward. It appears to be of good fourth century workmanship but further details cannot be determined until after the bronze has been cleaned and the original surface brought to light.

The spring is, of course, the excavation season for the "Foreign Schools" although some of the Greek archaeologists work later in the summer, wherever the character of the ground permits. Many sites would, however, be baked so hard by the sun that nothing less than dynamite could loosen the soil!

The French School were excavating at Mallia in Crete during the early spring, continuing the excavations carried on there for several years. Their discoveries this season, have not yet been made public but are said to be of great value for the Middle Minoan period.

The British School carried on two excavation campaigns this spring, one in March in the Vardar Valley, Macedonia, continuing the exploration of mounds begun last year. Mr. W. A. Heurtley was in charge of the excavation and concentrated his work chiefly on the large "Toumba" of Vardarovca, which dominates the whole of the lower Vardar. The artificial deposit here is estimated at sixteen to twenty metres, and two more seasons will be required to complete the work. The results have so far been unusually important, since, unlike the upper strata of mounds hitherto explored in Macedonia, those at Vardarovca were found to be quite undisturbed and as far as could be ascertained there was no long period of non-occupation on the Toumba. Below two settlements of the Hellenistic period and just above a thick layer of ashes and sherds of Mycenaean ware, was found pottery of a type already known from the finds at Pateli, from the cemetery of Chauchitza, from last year's excavation at Vardino, and from rare examples from Troy, Thessaly, and Skyros, but whose chronological limits it had not been possible to determine. Mr. Woodward, in his annual report states that "there is reason to believe that when the excavation of this site has been completed, an unbroken sequence of Macedonian pottery, from the earliest times, will be obtained, and that the relations of pre-historic Macedonia to Asia Minor, Thessaly, and the North respectively will be definitely ascertained."

In April the campaign was resumed at Sparta under Mr. Woodward, the Director of the School. The work, as in 1924, was divided between the Theatre, the Acropolis and out-lying sites, and each area yielded interesting results. At the theatre important progress was made in clearing the stage-area, uncovering the parados-walls, and investigating the seating arrangements, and outer walls of the cavea. The Director's report states that "it is now possible to distinguish remains of four different periods of building in the stage, of which the earliest may possibly be Hellenistic. The second, and more massive, structure shows remains of a typical Roman proscenium, with an elaborate façade, enriched, it appears, with a Corinthian colonnade, and three pairs of columns on massive chamfered plinths standing in front of it; the latter feature perhaps represents a later addition. Still later is the hyposcenium, with its marble facing and two semi-circular niches, found last year, and to a still later date (perhaps the fourth century), belongs a reconstruction of the west end of the stage into a self-contained room, with marble wall-encrustation, and a floor above the earlier stage level; this is approached by the rough flight of steps found last year, at the west end of the stage. The Byzantine fortress wall is in its turn a later accretion at a higher level, outside this room. The eastern parados-wall was cleared for more than half its length, and the series of inscriptions proved to stop about 14 metres east of the orchestra end, giving us over 30 inscribed blocks *in situ*, not to mention more than a dozen other fallen blocks represented by complete or fragmentary stones. No

similar inscriptions, were, however, found at the west side of the stage, the facing-blocks of the wall having been almost all robbed. The parados-walls, moreover, had an interesting and exceptional feature, in that they made an outward bend at right-angles, and then continued on their original lines, thus allowing space for an outside stairway to be carried on this projection, which gave access undoubtedly to the diazoma. By removing the later Byzantine wall built over the steps and seats nearest to the west parados, remains of ten rows of seats in position and of twenty steps alongside them were found, thus enabling the scale and slope of the seats to be determined. The theatre proves to have had about thirty rows of seats below, and twenty above, the diazoma, and was divided by ten flights of steps in the lower, and nineteen in the upper portion, exclusive of the external flights.

On the Acropolis the deposit of votive débris from the Chalkioikos Sanctuary proved to be unexpectedly deep and extensive, but the most important find from this area was a marble statue, slightly larger than life size, of a bearded warrior, wearing a helmet with cheek-pieces drawn down; these are decorated with a ram's head. The statue, save for the arms, is complete down to the waist; and in addition a large portion of the marble crest of the helmet was found, the left leg, from knee to ankle, wearing a greave adorned with spirals and a bearded snake's head, a small piece of the right foot, and a bit of the edge of the shield. "The head which is turned somewhat to the left, with the gaze slightly upward, is firmly set on a powerful neck, and the pose, as is borne out by the treatment of muscles of the shoulders and back—which are beautifully rendered—indicates that both arms were advanced and somewhat raised; the attitude should rather be interpreted as an alert defensive than an advance to the attack. The material is Parian marble, and the style, taking into account that the head is treated more archaically than the body, suggests a date about 480–470; certain details of treatment support the idea that it may be the product of a Peloponnesian School, of which our knowledge is still scanty. . . . The probability that it represents one of the heroes of the Persian Wars is considerable, and if choice be made, the pose suits better the last stand of the Hero of Thermopylae." From this same region comes the painted head of a large terracotta figurine, probably not later than—and perhaps antedating—700 B.C., in superb preservation. The pottery included Geometric, Laconian, Attic—both Black and Red-figured—and Hellenistic vase fragments decorated with medallions in relief, representing mythological scenes and types.

Close to the theatre, trial trenches revealed a Roman structure with an elaborate mosaic pavement—perhaps part of the Baths—and farther eastward near the modern road to Tripolis a Roman villa with complicated system of hypocausts was found and cleared.

The chief excavations conducted by the American School this year were the double campaign at Corinth where Mr. Shear supervised the work on the Theatre and the region east of it and cleared a Roman villa farther west toward Sicyon. Mr. Shear's own account of these excavations will appear in an early number of the JOURNAL so there is no need to summarize the results here. Mr. Hill's campaign was still in progress in August so that only a brief statement of his work can be given now. It centred chiefly around the Temple Hill where the temple precinct was cleared and the stoa below the temple bared to its full length. This has been called the Greek NW Stoa as it borders the north side of the Agora at the west end, and is very impressive as now cleared. This excavation will make it possible to have the architects' drawings of the buildings in this region completed for the final publication of the excavations at Corinth. Work was also carried on to the west and south of Glauké to settle its relation to other buildings and roads in that region, in preparation for its publication. A large part of the surface of the

Lechaion Road has been cleared and the Byzantine ramp torn down. Enough coins have been found here to make it possible to date the construction and early use of this ramp. There have been many interesting architectural pieces and sculptural fragments among the finds, about forty different bits of inscriptions, some rather large, and one very fine bronze statuette of Mars or Ares in armor, found near Glauké.

The prehistoric excavations conducted by the School were, the one at the Argive Heraeum mentioned in the last news letter and one at Eutresis in Boeotia under the joint auspices of the Fogg Art Museum and the American School. Miss Hetty Goldman continued the work begun at this site last autumn and cleared the Middle Helladic houses covering the hilltop. The house walls remain standing to a low height only, but enough is left to show the plans of the dwellings. Quantities of both Middle and Early Helladic pottery were found, the latter from pits dug through the Middle Helladic layer. Miss Goldman is to return, I believe, for a further campaign in the fall or next spring as the work so far has yielded especially valuable results.

Mr. Blegen closed his excavations at the Argive Heraeum early in May and his preliminary report of the results will be published in a future number of the Journal. He has definitely established that this site was occupied from neolithic times onward. The presence of a deposit of polychrome neolithic pottery of the Thessalian II Period type, never before found in the Argolid, is especially noteworthy, while house walls and pottery belonging to the Early, Middle and Late Helladic periods were found on the Acropolis above the Temple terrace. One Early Helladic tomb, nine Middle Helladic graves and thirteen Late Helladic rock-cut chamber tombs were opened. These latter are interesting architecturally chiefly for comparison with the similar tombs found in the Kalkani cemetery by Mr. Wace at Mycenae. Their contents, however, far exceed the interest of the tombs themselves, since more than two hundred vases, many of them unbroken, were removed from the tombs. These form an excellent series for studying Mycenaean pottery in its successive stages while certain individual specimens are the finest examples of their type found on the mainland. A great number of bronze weapons, swords, spearheads, knives, cleavers and dozens of arrowheads, with two splendid inlaid daggers, show the skill of the bronze workers of the period. These daggers have not been fully cleaned but the design on one represents flying birds, while the other has a lifelike dolphin poised in the centre of the blade. Hollow gold beads from two necklaces were found in one tomb; one consists of spherical beads with a granulated collar, suggesting pomegranates in shape, while the second is more elaborate, having eleven beads in the form of a pendent lily and sixteen smaller shield-shaped ones. The beads of this necklace resemble in technique the Vaphio cups, being made of two sheets of gold, the back one plain and the front bearing the design. A number of carnelian beads of various shapes, one representing an elephant, came from the tombs, together with beads of amber and several seal stones and one Egyptian scarab.

E. P. B.

Archaeological
Institute
of America

THE EAGLE AND THE BASKET ON THE CHALICE OF ANTIOCH [1]

In a monumental work published by the owners of the chalice[2] Dr. G. A. Eisen has set forth the results of his nine years' study of this masterpiece of early Christian art. He concludes that the silver holder is a work of the first century of our era, that the twelve seemingly portrait figures are authentic portraits, two of Christ and ten of as many early Christian leaders, and that the interior cup is probably the actual cup used at the Last Supper.

Conclusions so sensational will, unfortunately, arouse both for and against them prejudices which should have no place in a discussion of facts. Furthermore, since the chalice is obviously loaded with symbols, archaeologists who accept the principle that Christian symbolism originated not long before the year 100 and developed rather slowly throughout the next two centuries, cannot consistently assign it a date much earlier than the fourth century, and some would prefer to put it later.

Yet I think that few persons who have seen the chalice itself will feel disposed to ridicule Dr. Eisen's conclusions, however unable they may be to accept them. No photographs or other reproductions convey an adequate idea of the impression which these extraordinary figures make upon virtually all who see them, and any one at all familiar with the pagan and the Christian art of the first four centuries will at once appreciate the difficulty of assigning them to a late date in that period, and of regarding them as nothing more

[1] A paper read before the American Philosophical Society, Nov. 7, 1924, and in public before the Biblical and Oriental Fund of the American Schools of Oriental Research, Union Theological Seminary, New York, Dec. 29, 1924.

[2] *The Great Chalice of Antioch*, Kouchakji Frères, Paris and New York, 1923. Vol. I, Text, by G. A. Eisen; Vol. II, Plates. See also Dr. Eisen's earlier articles in *A.J.A.*, xx (1916), 426–37, xxi (1917), 77–79, 169–86; and in *The New Era Magazine*, Jan., June, July, 1920. James A. Montgomery, *A Note on the Great Chalice of Antioch*, in *A.J.A.*, xxi (1917), 80 f.; Louis Bréhier, *Les Trésors d'argenterie Syrienne et l'école artistique d'Antioche* in *Gazette des Beaux Arts*, 1920, t. 1, 173–96, Charles Diehl, *L'École artistique d'Antioche* in *Syria*, II (1921), 84–5, Pl. IX; Arthur Bernard Cook, *The Chalice of Antioch* in *The Cambridge Review*, XLV, No. 1111 (Feb. 15, 1924), 213–16; also in *The Illustrated London News*, Aug. 1924, and in the Appendix to *Zeus*, Vol. II; F. J. Foakes-Jackson in *The Churchman*, Feb. 2 and 9, Aug. 16 and 23, 1924; anon. review in *The London Times Literary Supplement*, June 5, 1924; Strzygowsky, review in *Jahrb. d. asiatischen Kunst*, 1924, 53–61; Sir Martin Conway in *The Burlington Magazine*, XLV, No. 258 (Sept. 1924); J. P. Kirsch in *Römische Quartalschrift*, XXX (1916–22), 106–7, who refers to Volbach in *Germania, Korrespondenzblatt d. Röm.-Germ. Kommission d. Archäol. Inst.* 1918, 23–5. W. B. McDaniel, *The Great Chalice of Antioch* in *Classical Weekly*, Vol. 18 (1925), pp. 123–127.

It gives me pleasure to acknowledge the courtesy of Prof. C. R. Morey in permitting me to consult the *Index of Christian Art* now in course of preparation under his direction by the Department of Art and Archaeology of Princeton University, a gigantic work which is already of great value and which when completed will be indispensable to all students of the subject.

than the products of an idealizing imagination. The problem which they present is, indeed, the chief problem of the chalice.

I have long doubted, on independent grounds, the supposed late origin of Christian symbolism. The only positive evidence is that of the Roman catacombs, in which symbols make their appearance in the course of the second century. But it is obvious that the first appearance of a symbol in funerary art is not trustworthy evidence for the date of its invention, just as the appearance of a new word in an inscription does not warrant the inference that it was coined by the author of the inscription. Symbols are but visible equivalents for words, and, as in the case of words, the fact that they are used at all proves that they have a long history behind them during which they were gradually winning general acceptance. Funerary customs, in particular, are notoriously tenacious of tradition, and the relative frequency of the various symbols employed in the catacombs must reflect in no small degree the "conservative" and the "liberal" inclinations of individual members of the Christian community as regards the decoration of their family tombs; it certainly cannot be taken as direct evidence of the extent to which Christians in general would have understood their meaning.

Positive, direct evidence for the seventy years preceding the earliest catacomb burials is lacking, but the indirect evidence is ample, and it all points towards the same conclusion. No one can turn the pages of such a book as Mr. A. B. Cook's *Zeus*—to mention one out of many—without realizing that the Hellenistic peoples from whom the first Gentile converts to Christianity were drawn expressed their ideas in symbols, not merely occasionally, but habitually; one may, indeed, speak of their "language of symbols" as appropriately as of their "language of words." There is no reason for assuming that their conversion to Christianity would have affected their inclination towards this mode of expression. So also of the evidence from literature. The earliest Christian literature abounds in metaphor and symbol, and some of the early books, such as the *Apocalypse* of John, the *Shepherd* of Hermas, and the *Testament of Hezekiah*, convey their messages in symbols so artificial and elaborate that they are in large part unintelligible to the modern reader in the absence of an explanation. The assumption that for three generations, nearly one hundred years, Christians abstained from giving their ideas those concrete modes of expression which had been habitual with them before their conversion and were universal among their contemporaries, is so improbable that nothing but direct and conclusive evidence could make it credible. Of such evidence none is forthcoming.

I do not, therefore, regard Dr. Eisen's conclusions as *a priori*

inadmissible. Furthermore, so far as I am able to form an opinion, not being an archaeologist by profession, I think the evidence now in hand distinctly in favor of a first century date for the holder. In the present paper, however, I am not concerned with this issue but with a minor problem, one which lies in a field with which I am more familiar, the philosophical and religious ideas of the Hellenistic age.

The general framework of the chalice design (Fig. 1) is a vineyard springing from six pairs of stems; the branches, leaves and bunches of grapes are so disposed as to form twelve medallion-like spaces

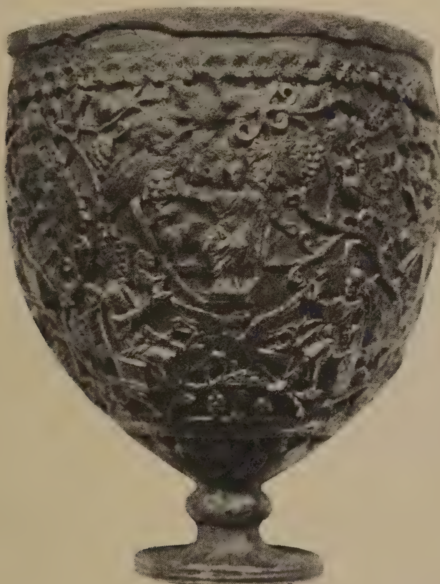

Figure 1. The Chalice of Antioch (Courtesy of Kouchakji Frères)

in which are placed twelve seated figures. Two, on opposite sides of the holder, represent Christ, one as a younger and one as an older man. These are, respectively, the central figures of two well defined groups, each composed of five figures, surrounding and facing the figure of Christ and coördinated to it by extending toward it the right arms in the gesture of *adoratio*. The younger Christ uplifts the right hand in a gesture of benediction; in the left is an open scroll, symbol of the "New Law." The left hand of the elder figure has been destroyed, that which is seen in Figure 1 being a restoration by André. The right is outstretched towards a plate on which are seven loaves, two fishes, and one or two smaller objects of uncertain character. To the right of the chair is a lamb with its hindquarters towards the chair but turning its head backward and upward in a wistful attitude towards Christ. Beneath the pedestal of the

chair is a large basket full of loaves, flanked by two bunches of grapes; upon the loaves is perched an eagle with wings uplifted as if on the point of taking flight.

The eucharistic basket closely resembles the type which first appears in the catacomb paintings of the early second century, but the *conjunction* of the eagle and the basket is, so far as I have been able to ascertain, unique in Christian art, and its interpretation is by no means obvious. The eagle, indeed, occurs but rarely upon Christian monuments, and some good authorities (e.g. J. P. Kirsch in Cabrol's *Dictionnaire d'Archéologie Chrétienne et de Liturgie* s.v. *Aigle*, I, 1037–8) hold that it is never used as a symbol but as a decorative element only. In Christian literature also the eagle is not a symbol possessing any fixed and generally recognized value; it is taken as a symbol, usually, only in commentaries on passages of scripture in which it is mentioned, and its signification then varies with the context. For example, it is interpreted as representing the rapacious man,[1] the Christian Church,[2] the devil,[3] the human soul,[4] and Christ.[5]

The eagle of the chalice is discussed by Dr. Eisen, Vol. I, pp. 25–6, and his conclusions are briefly stated on p. 127 as follows:

> The first one to suggest the symbolism of the eagle was Walter Lowrie, author of "Monuments of the Early Church." The eagle according to him can, in the instance of the Chalice, only represent the Roman Empire. This symbolism had already been in use since the time of Herod as recorded by Josephus. Herod placed a golden eagle on the top of the temple in order to symbolize the power of Rome, which was above all.[6] The Chalice theme is that the Roman Empire partakes of the benefits of Christianity as administrated by Peter and Paul, the two nearest Apostles.

Although this interpretation is not impossible, another, which was first suggested to me by a series of monuments collected and studied and in part first published by Cumont, [7] seems to me preferable. Cumont enumerates 24 tomb-reliefs of the same type and illustrates 14 of them, of which four examples will be found in Figures 2, 3, and 4. Among the illustrations are 12 eagles and 6 baskets. Four of the baskets occur with the eagle, two without it. Nearly all come from the region of Membidj, the ancient Hierapolis, or

[1] *Epistle of Barnabas*, X, 4.

[2] Methodius, *Convivium decem virginum* in Combefis, *Graecorum Patrum Auctuarium* 1672, Pars I, p. 115C.

[3] Origen, *In Ezechielem Hom. XII*, Migne, Opera, Vol. III, col. 752–7.

[4] Origen, *Selecta in Psalmos*, Migne, Opera, Vol. II, col. 1560.
Maximus of Turin, *Hom. LIX*, Migne, 57, col. 366.
Ambrose, *De Mysteriis*, c. VIII, Migne, 16, col. 420.
Augustine, *Enarratio in Psalmos*, Migne, Opera, Vol. IV, col. 1323–4.
Physiologus Leidensis, c. XXIV in Land, *Anecdota Syniaca*, Vol. IV.

[5] Augustine, *Annotationes in Job*. Migne, Opera, Vol. III, col. 884.

[6] The account of the eagle erected by Herod over the great gate of the Temple will be found in Josephus *Antiq. Jud.* XVII, 6, 2; *Bell. Jud.* I, 33, 2.

[7] *L'aigle funéraire des Syriens*, in *Rev. de l'hist. d. rel.*, T. 62 (1910), pp. 119–63; reissued, somewhat revised and enlarged, in his *Études Syriennes*, Paris, 1917, pp. 35–118. References are to this second publication.

from that of Bâlkîs (Zeugma) on the Euphrates, which towns are about one hundred miles to the eastward of Antioch and about 20 miles apart.

Cumont does not express any opinion as to the dates of these monuments, beyond attributing them to the age of the Empire. But, in this context, precise dates would not be of especial significance. The reliefs express ideas which can be traced for nearly a thousand years in Greek and Roman philosophy and religion and which were widely accepted, not only in Antioch and its vicinity, but throughout the Empire during the first four centuries of our era.

Figure 2. Funerary Reliefs from Bâlkîs (Zeugma), North Syria. (Reproduced from Cumont *Études Syriennes*, Paris, Picard, 1917, p. 46)

The superficial resemblance between the group on the chalice and the figures of the tomb-reliefs is striking. Is it nothing more than a superficial resemblance?

On *a priori* grounds one would presume that it probably is more. In the first place, eagles have no natural affinity to baskets; their association on the reliefs and their conjunction on the chalice point to congruence between the ideas which they symbolize as the ground of the connection. In the second, since the ideas expressed by the reliefs must have been familiar to virtually the entire pagan and Christian population of north Syria throughout the period to which the chalice can be attributed, the eagle and the basket must have been speaking images to all, and it is not likely that a Christian artist would have used such familiar pagan symbols to convey ideas radically different from those which were already attached to them.

What, then, was their meaning to the pagan? The monuments themselves make it evident that both eagle and basket symbolize the soul of the deceased. For example, on the family monument

shown in Figure 3, beneath two eagles standing side by side is the legend, "Phalados, Zoöras, brothers." Adjacent is the bust of a woman, inscribed, "Soualaia, their nurse," and, next to it, a basket which is declared to be "Zebinnou, their sister." Thus the eagle, the portrait and the basket all represent the soul of the deceased, seemingly indifferently. In Figure 4 the upper register exhibits portraits of a man and a woman, the lower, a basket and an eagle. Here the portraits perhaps symbolize the earthly body buried within, but the basket and the eagle certainly represent the souls, now ascended to heaven.

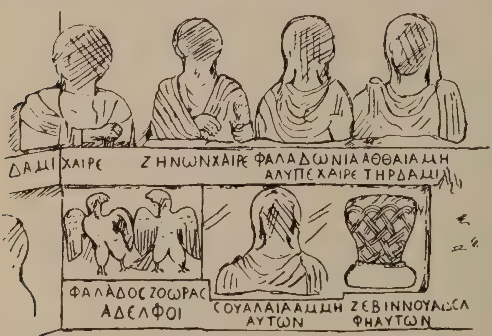

FIGURE 3. FAMILY TOMB, BÂLKÎS (CUMONT, *op. cit.* P. 42)

The ideas which associate the eagle with both the sun and the soul are admirably analyzed and explained by Professor Cumont in the monograph to which I have above referred, but the connection between the basket and the soul he does not attempt to explain, merely suggesting that it may have been derived from the "mystic cist" which figures in many oriental Mysteries, or may have been a moon-symbol, as the eagle had been a sun-symbol.[1]

The significance of the basket, however, as well as that of the eagle, can be explained by reference to the ideas of that "solar theology" which was introduced into Rome from Syria in the first century before Christ, which later became the official re-

FIGURE 4. STELÉ, MARASH (CUMONT, *op. cit.* P. 48)

[1] P. 49: "Il ne faut pas voir dans celle-ci la corbeille à laine qu'on rencontre fréquemment sur les stèles funéraires avec la quenouille, le peigne, le miroir, etc. Si ce panier était un objet domestique, que signifierait la couronne qui le surmonte? Voudra-t-on aussi considérer l'aigle qui l'accompagne, comme un oiseau apprivoisé, avec lequel le défunt se distrayait durant sa vie? La corbeille doit avoir ici une autre signification. Nous serons plutôt tentés d'y reconnaître la ciste mystique si souvent reproduite par l'art antique, et qui était un élément essentiel des cérémonies secrètes dans plusieurs cultes orientaux. Mais nous n'entreprendrons pas d'élucider cette question accessoire." Professor Cumont adds in a footnote: "On serait tenté de croire que la corbeille sacrée, qui appartenait à plusieurs déesses, comme Déméter, Hélène, . . . est ici l'emblème de la divinité lunaire, comme l'aigle l'est du soleil."

Proof-correction affords me the opportunity of calling attention to two important contributions to the study of the eagle and basket symbols which ap-

ligion of the Empire, and which has been so exhaustively studied by Professor Cumont in a series of well-known books.[1]

Originally, no doubt, a primitive sun-worship, the cult in time came to include the vivifying rays of heat and light which proceed from the sun, and the ideas associated with it were ultimately introduced into philosophy, becoming the basis of a crude pantheism. The common substance of which the world is made is conceived as at once mind and matter. As Mind, it is Thought and God; as Matter, it was imagined as a hot, luminous, gaseous substance with some of the properties of superheated steam, and was variously designated, sometimes as "Fire," sometimes as "Aether," sometimes as "Pneuma," "Breath" or "Wind," sometimes as "Light." The word "aether" αἰθήρ properly signifies the brightly illuminated upper region of the atmosphere, above the level of cloud and mist, and is usually distinguished from the heavy, murky ἀήρ of the lower regions. Hence it is frequently, especially in poetry, used as almost interchangeable with "fire" and "light," less frequently (but often by Empedocles) as equivalent to "air."

In the philosophical schools these vague conceptions assumed various but more definite forms, of which I need mention that one only which is relevant to the present problem. Earth, water, air, aether, fire, and light were regarded as diverse manifestations of one and the same underlying substance, not identical with any one of them but usually termed "fire," or, πνεῦμα, in Latin *spiritus*, from which is derived the modern conception of "spirit." Earth changes into water, water into air, air into aether, aether into fire. Thus, while any one of the other elements may serve as fuel for fire, aether, as being the only element which changes directly into fire, is alone its proper fuel. But with these physical or "scientific" conceptions the earlier, animistic ideas remained inextricably intertwined. All the elements are conscious to some degree, but aether, fire, and light possess intelligence of a higher order than that of the lower elements, and the larger the mass of any one of these elements the greater and more powerful the mind associated with it. The sun, the stars, and the great mass of aether which surrounds the earth are gods of high degree. The human soul, which is a tiny spark of

peared, some time after my article had been sent in to the *A. J. A.*, in the *Annual of the American Schools of Oriental Research*, Vol. V, 1925, namely *Eagle and Basket on the Antioch Chalice*, by Prof. B. W. Bacon and *Cuneiform Parallels to Solomon's Provisioning System* by Prof. R. P. Dougherty.

[1] *Les Religions Orientales dans le Paganisme Romain*, Paris, 1907.

English translation: *Oriental Religions in Roman Paganism*, Chicago, 1911.

La Théologie Solaire du Paganisme Romain, in *Mém. Acad. d. Inscr.* Tom. XII, 2me Partie, 1909.

Le Mysticisme Astrale dans l'Antiquité, in *Bull. de l'Acad. royale de Belgique*, Classe d. lettr. No. 5, Bruxelles, 1909.

Astrology and Religion among the Greeks and Romans, New York, 1912.

The After Life in Roman Paganism, Yale Univ. Press, 1922.

fire or portion of aether, possesses a much lower intelligence and is inferior in power. As fires, the sun and the stars consume the aether surrounding them, but as gods they feed upon it, it is their celestial food. So also the soul, when emancipated from the body by death, ascends to the upper regions and there, like its kinsfolk the gods, finds its sustenance and nourishment in the aether.[1]

The association between the eagle on the one hand and the sun and the soul on the other has been traced by Professor Cumont back to Babylonian times, and was undoubtedly established by the eagle's habit of soaring high up in the aether, far above the level reached by other birds.[2] The nature of the relation between the eagle and the soul was not, however, always conceived in the same way. Sometimes the eagle was supposed to bear the soul of the deceased upon his back to the upper realms, a conception frequently expressed both in literature and in art. Figure 5, which is taken from an ordinary earthenware lamp now in my possession and not before published, indicates how well known this conception must have been even to the common people of Rome.

FIGURE 5. ROMAN LAMP IN POSSESSION OF W. R. N.

The bust on the eagle's back should indicate a person deceased, but the thunderbolt clutched by the eagle is an attribute of Zeus, and it

[1] The sources will be found assembled in Cumont's works; two passages must here suffice:

Cicero, *Tusc. Disp.* I, 19 (ed. T. W. Dougan, Cambridge, 1905): *qui* (i.e. animus) *si permanet incorruptus suique similis, necesse est ita feratur, ut penetret et diuidat omne caelum hoc, in quo nubes, imbres uentique coguntur, quod et umidum et caliginosum est propter exhalationes terrae. quam regionem cum superauit animus naturamque sui similem contigit et adgnouit, iunctis ex anima tenui et ex ardore solis temperato ignibus insistit et finem altius se ecferendi facit. cum enim sui similem et leuitatem et calorem est adeptus, tamquam paribus examinatus ponderibus nullam in partem mouetur, eaque ei demum naturalis est sedes, cum ad sui simile penetrauit: in quo nulla re egens aletur et sustentabitur isdem rebus, quibus astra sustentantur et aluntur.*

Lucan, *Phars.* IX, 6 (quoted by Dougan on this passage):

Quodque patet terras inter lunaeque meatus
Semidei manes habitant, quos ignea uirtus
Innocuos uitae patientes aetheris imi
Fecit.

[2] "Hermes" Λόγος Ἴσιδος πρὸς Ὧρον [Stob. *Ecl.* p. 1074 H]: The eagle, when released from a cage [τραπήσεται] . . . εἰς τὸν αἰθέρα ὅπου καὶ φύσιν ἔχει διαιτᾶσθαι.

may be, as the Editor suggests to me, that the scene depicted is the rape of Ganymede, a theme often introduced on funerary monuments as symbolic of the soul's ascent to heaven. This belief was popularized by the custom which was observed at the cremation of every Roman Emperor from Augustus onward of releasing a living eagle from the pyre when it was lighted in order that the people might see the soul of the Emperor actually ascending to heaven. No doubt opinions differed among the populace whether the eagle was the bearer of the soul, or was the soul itself. Lucian relates with malicious satisfaction (*de morte Peregrini*, c. 39–40) how, after the fanatic Peregrinus had cast himself into the fire, Lucian himself set afloat among the excited crowds the story that a vulture had been seen to rise from the flames and ascend to heaven, crying with a human voice, "I have left the earth and am going to Olympus." But in a late epigram addressed to the eagle on Plato's tomb (Cumont, pp. 88–9) the meaning is more ambiguous:

> "Why, why, O Eagle art thou perched upon a tomb?
> Tell me, what god's starry dwelling is the object of thy gaze?"
> "Plato's soul I image, to Olympus flown away,
> Though his earth-born body Athenian earth retains." [1]

Since the basket represents the soul on the Syrian reliefs quite as well as does the eagle, there is no more reason for supposing that the makers of those reliefs believed that the soul actually took the form of an eagle after death than for supposing they believed it took the form of a basket; the eagle is a symbol of the soul and no more.

A clew to the meaning of the basket-symbol is supplied by a passage in Macrobius. In course of his description of the shrine of the sun-god at Hierapolis he says:

> The natives of Hieropolis, Assyrians by race, comprise all the powers and virtues of the sun under the form of a single bearded image, which they call Apollo. His face is represented as having a pointed beard; *and a basket projects above his head*. . . . The eagles beside him look as if they were flying. . . . The beard below his chin signifies that rays are shot downwards on to the earth. *The golden basket rising aloft indicates the apex of the upper air, from which the sun is supposed to derive its substance.*[2]

[1] Αἰετέ τίπτε βέβηκας ὑπὲρ τάφον; ἢ τίνος, εἰπέ,
ἀστεροέντα θεῶν οἶκον ἀποσκοπέεις;
Ψυχῆς εἰμὶ Πλάτωνος ἀποπταμένης ἐς Ὄλυμπον
εἰκών. σῶμα δὲ γῆ γηγενὲς Ἀτθὶς ἔχει.

[2] Macrob. *Sat.* I, 66–8 (Eyssenhardt, p. 103, 4): *Hieropolitani praeterea, qui sunt gentis Assyriorum, omnes solis effectus atque uirtutes ad unius simulacri barbati speciem redigunt eumque Apollinem appellant. huius facies prolixa in acutum barba figurata est eminente super caput calatho . . . aquilae propter exprimunt instar uolatus . . . radios in terram superne iaci barba demissa significat. calathus aureus surgens in altum monstrat aetheris summam, unde solis creditur esse substantia.* The above translation is taken from Mr. Arthur Bernard Cook's *Zeus, A Study in Ancient Religion*, Vol. I (Cambridge, Eng. 1914), p. 585. To him also I am indebted for this important reference. Mr. Cook gives on p. 586 a figure (No. 448) of a coin of Hierapolis struck about two centuries before Macrobius' time, on which are depicted two seated deities with baskets on their heads of the same type as those seen on the Syrian reliefs, while beneath their feet is an eagle with uplifted wings.

The basket carried on the head of the sun-god (and it should be remembered that such large baskets, devoid of handles, were usually carried on the head) is, then, a basket of his heavenly food, the aether.

The conception may be defined more precisely with the aid of another interpretation given by Macrobius of the same symbol. Speaking of the worship of Sarapis at Alexandria he says:

"Adjacent to the land of Egypt the city which boasts Alexander of Macedon as its founder reveres Sarapis and Isis with a worship falling little short of awestruck veneration. Under that name, it is to the sun that this veneration is paid, as the city itself bears witness by placing on his head a basket, and also by," etc.

"The crown of his head, adorned with a basket, indicates the lofty height of that star, and also *signifies his containing power*, for all earthly things return to him, being snatched up by the heat which he sends down." [1]

The basket is, then, essentially to Macrobius' mind *a container*. In the first case it is the container of the sun-god's celestial food, the aether; in the second it signifies the sun's function of swallowing up and containing within itself the vapors arising from the earth, all of which become aether before they are absorbed into the sun. The first is an animistic, the second a physical conception.

If the conception of "container" be applied to the baskets on the tomb-reliefs a plausible interpretation of their meaning, taken as symbols of the soul, at once becomes apparent. For the aether is not only the food of the soul, it is also the substance of the soul, as it is, according to Macrobius, the substance of the sun-god; the soul is nothing more than a tiny portion of aether enclosed in a material body, and the artist who wished to symbolize the soul as released from the material body and yet as still retaining its individuality could scarcely have found a more appropriate symbol than the familiar basket of aether. And this, I take it, is the reason why the baskets on the tomb-reliefs are invariably *empty;* they are not really empty, but their very emptiness portrays the presence of the invisible aether.

With these ideas in mind it is not difficult to interpret the group of symbols, which is, so far as I know, unique, shown in Figures 6 and 7,[2] and taken from a rectangular marble cist for the reception of the

[1] *Sat.* I, xx, 13–16 Eyssenhardt: *Eidem Aegypto adiacens ciuitas, quae conditorem Alexandrum Macedonem gloriatur, Sarapin atque Isin cultu paene adtonitae uenerationis obseruat. omnem tamen illam uenerationem soli se sub illius nomine testatur impendere uel dum calathum capiti eius infigunt uel dum . . . Cuius uertex insignitus calatho et altitudinem sideris monstrat et potentiam capacitatis ostendit quia in eum omnia terrena redeunt dum immisso calore rapiuntur.*

[2] The right to publish this interesting monument was given by the present owner, Mr. Welles Bosworth of New York, to Dr. Eisen, who, in turn, transferred it, with Mr. Bosworth's consent, to me, an act of broad-minded generosity which calls for special recognition, inasmuch as Dr. Eisen knew that I intended to use it in an attempt to establish an interpretation of the eagle and basket which he does not himself accept. Mr. Fahim Kouchakji, from whom Mr. Bosworth acquired the cist, tells me that it came from the collection of the Roman dealer Sangiorgio. Presumably it was found in Rome, and should probably be dated in the first century after Christ, since the combination of the heads of Jupiter Ammon at the upper corners with eagles at the lower was a design fashionable in Rome during the period from Tiberius to Domitian (Altmann, *Die Römische Grabaltäre der Kaiserzeit*, 1905, p. 88).

ashes of the deceased. It measures in width 0.245 m., height 0.17 m., depth 0.20 m. The front (Fig. 6) displays a framed tablet from which the inscription has been erased; on either side the upper corners are adorned with the horned but human heads of Jupiter Ammon, a well-known sun-divinity, beneath which, at the lower corners, are two corresponding eagles with wings uplifted and with their heads turned toward the tablet. Suspended by ribbons from the horns of the Ammon heads is a heavy garland, and beneath it on either side are two birds (doves?), much defaced but still recogniz-

FIGURE 6. MARBLE CIST (COURTESY OF MR. WELLES BOSWORTH OF NEW YORK)

able; above the garland a female figure reclines upon a couch with a pillow beneath the head. The triangular pediment of the cover bears in the tympanum a rosette; that it is here a symbol of the sun is put beyond question by the stars which flank it on either side. The cover represents a palm-leaf (?) mat rolled up at either side; the ends of the rolls are finished in rosettes.

All these symbols are of frequent occurrence on similar monuments of the first century found in Rome and are readily interpreted into the language of the solar religion. The Ammon heads are symbols of the sun (Cook, *Zeus*, I, p. 348 *sqq.*). The eagles may also represent the sun, but their juxtaposition with the doves makes it more probable that they, like the latter, are soul symbols. The garland probably suggests the happy state of the deceased just as the sun and stars above his name betoken his heavenly dwelling-place. The nude figure beneath the inscription-tablet, as are probably all

symbols in similar position, is a graphic representation of the soul whose name is recorded above. Here the soul itself is portrayed, divested of its mortal raiment. Elsewhere it is often represented by an eagle (Altmann, *op. cit.* figs. 1, 40, 42, 62, 64, *et al.*), or as a winged sun-disk. With this last symbol one may compare Plutarch's approximately contemporary description of the ascent of the spirit:

> But those that have reached the heights and have attained a position of security, first, like the victors in the games, roam about wearing garlands of feathers, termed "of stability," because during life they had rendered the soul's irrational and passible element gentle and amenable to reason and adorned therewith. Second, *with faces like sunbeams and forms like fire* they are borne upward by the aether about the moon, as here below by the air, and acquire from it temper and strength as do tempered tools from the water-bath. For whatsoever thinness and turbidity still remain in them are improved and they become firm and transparent, so that they are nourished by the exhalation which they encounter.[1]

On other monuments the soul is represented by doves (Altmann, *op. cit.* figs. 27, 60), by the bust or portrait of the deceased (figs. 45, 57, 62, *et al.*), by the inscription alone (figs. 54–59). The nude figure seems to be a rare symbol of the soul; Altmann gives but one representation of it (fig. 79), although he describes another (No. 61).

On each side of the cist is depicted a large and obviously empty basket (fig. 7). The two baskets differ slightly in size but in other respects the designs of the two sides are identical. A fillet is thrown across the top in such manner that its ends hang down almost to the ground while the middle part sinks into and is concealed by the basket. Two objects resembling palm branches or feather wands project from the basket near the fillet; between them is a pine-cone, such as usually forms the tip of the thyrsus carried in Bacchic processions. Here also it should probably be conceived as supported by the shaft concealed within the basket. To the (observer's) right of the cone is an object which might be taken as a large leaf or feather. Around the middle of the basket is a band resembling in structure the fillet, but narrower.

The pine-cone occurs on funerary monuments (cf. Altmann,

[1] Plut. *De facie in orbe lunae*, c. 28 (943E). The text is corrupt. I print Dübner's text with the emendations I have adopted: *αἱ δ' ἄνω γενόμεναι καὶ βεβαίως ἱδρυθεῖσαι, πρῶτον μὲν, ὥσπερ οἱ νικηφόροι, περιίασιν ἀναδούμενοι στεφάνοις πτερῶν εὐσταθείας λεγομένοις, ὅτι τῆς ψυχῆς τὸ ἄλογον καὶ τὸ παθητικὸν εὐήνιον ἐπιεικῶς τῷ λόγῳ καὶ κεκοσμημένον ἐν τῷ βίῳ παρέσχοντο. δεύτερον, ἀκτῖνι* (l.–*σι*) *τὴν ὄψιν ἐοικυῖαι πυρὶ δὲ τὴν ψυχήν* (l. *φυήν*), *ἄνω κουφιζομένην* (l.–*όμεναι*) *ὥσπερ ἐνταῦθα* <*τῷ ἀέρι οὕτως ἐκεῖ*> *τῷ περὶ τὴν σελήνην αἰθέρι, καί τόνον ἀφ' αὐτοῦ* (l. *ἀπ' αὐτοῦ*) *καὶ δύναμιν, οἷον τὰ στομούμενα βαφὴν* (l. *βαφῇ*) *ἴσχουσι. τὸ γὰρ ἀραιὸν ἔτι καὶ διακεχυμένον ῥώννυται, καὶ γίνεται σταθερὸν καὶ διαυγὲς, ὥστε ὑπὸ τῆς τυχούσης ἀναθυμιάσεως τρέφεσθαι.*

The feather garlands are probably cult objects, since they are designated by a technical term; no doubt they symbolize the wing of the soul by which she flies upwards. "Lucian" states (*De Dea Syria*, 55) that every worshipper at Hierapolis, upon first entering the city, offers a sheep with special rites, shaves his head and puts on a garland or fillet. But how could feathers come to be symbols of "stability"? Possibly Plutarch's informant has mistranslated the Syriac word *qeyama*, which means "standing up," "rising up," hence "stability," and, in Christian Syriac, "resurrection."

op. cit. p. 28 and figs. 90, 91). According to Suidas, it was supposed to represent the heart of Dionysus from which the second Dionysus was born. It is then, probably, a symbol of life and immortality.[1]

In the Syrian monuments studied by Cumont the symbol of the soul, the eagle or the basket, is sometimes surmounted by a fillet, as in those shown in Figure 2, which he interprets as a symbol of victory. The structure of these fillets cannot be clearly made out. In the fillets on the cist, the middle portion, of which only the extremities can be seen, seems to be a kind of roll. From it two ribs descend, and to the ribs are attached ill-defined elements the soft, irregular contours of which strikingly resemble those of feathers. In fact, they resemble feathers much more than do the feathers on the bodies of the two adjacent eagles. At the ends of the fillets are objects corresponding to tassels but composed of elements flat, narrow, sharp-edged and trimmed at the extremities to a straight line. They look like stiff tail or wing feathers.

FIGURE 7. SIDE OF THE CIST SHOWN IN FIGURE 6

The two objects projecting above the basket on either side of the pine-cone resemble the fillet in structure; if composed of feathers they must be feather wands and the single object between the cone and the "wand" must be a large feather, presumably an ostrich feather.

I think it not unlikely that the fillet is the "garland of feathers" described by Plutarch, worn in the sun-ritual on earth as a magic means of imparting to the soul the power of soaring on high after death and therefore still worn by the soul that has now attained the height of heaven, and that the wand and the ostrich feather are also cult-objects of similar import. The band around the basket might then represent a feather girdle. But one may also take the "wands"

[1] Lobeck, *Aglaophamus*, I, p. 560, n.: *Hinc enim tracta videtur conjectura quem Suidas affert, de conis thyrsorum.* Κωνοφόρος. Κῶνος ὁ βοτρυοειδὴς τοῦ στροβίλου καρπός, ὃν ἔφερον αἱ γυναῖκες βαστάζουσαι ἐν ταῖς τοῦ Διονύσου τελεταῖς, ἐπειδὴ ὅμοιον τὸ σχῆμα τοῦ κώνου τῇ τοῦ ἀνθρώπου καρδίᾳ, ἐπιστάτην δέ φασιν οἱ Ἕλληνες τῆς καρδίας τὸν Διόνυσον. οἰκείῳ οὖν τινι μυστηρίῳ τοῦτο ἐποίουν. *Cornutus de Cybele, VI, 146.* καρδίαν ἀνατιθέασιν αὐτῇ, ὅτι αἰτία ζωογονίας αὐτὴ ἐγένετο.

as palm-branches and regard the other objects as composed of leaves.[1]

I do not know of any direct connection between the pine-cone and the Syrian cult. It may have been taken over by the latter from the kindred cult of the Great Mother.

A curious dream reported by Artemidorus probably should be referred to the same circle of ideas:

> A certain man dreamed that he was put by Sarapis into the basket which is on his head. The man died. For the god (Sarapis) is taken to be Pluto.[2]

Since Artemidorus says that he collected these dreams in Greece, Italy, and the province of Asia (preface to Bk. V), the dream itself may be taken as authentic, but one may doubt whether Artemidorus' interpretation is that which the dreamer would have put upon it, or that it has any relation to the association of ideas which originally suggested the dream. Many Greeks regarded Sarapis as a chthonian deity (Cook, *Zeus*, I, p. 188), but, as Macrobius proves, this was not the universal interpretation, and the evidence above given shows that in Syria, at least, a dream of being put into the basket on the sun-god's head would have been equivalent to a modern dream of being put into a coffin. Artemidorus, who is trying to rationalize oneiromancy as Ptolemy had rationalized astrology, may well have known of this popular belief and may have set it aside as a mere superstition.

The basket was probably originally the familiar food-basket, filled with aether as the food of the soul, and later taken as representing that portion of aether which is the soul itself. But, possibly, on the principle of sympathetic magic, the pictured basket may also

[1] Possibly connected with Plutarch's "garland of feathers" and with the Hierapolis cult is a Syrian tomb-relief published by Pognon, *Inscriptions Sémitiques* (Paris, 1907–8), *Inscription Syriaque dans une Grotte Funéraire*, Pl. XI, showing a figure wearing a headdress composed of large upstanding feathers, like that of an American Indian, and somewhat resembling one on a British Museum coin of Ptolemais-Ace (G. F. Hill, *Catalogue of the Greek Coins of Phoenicia*, 1910, Pl. XLII and p. lxxxv). Pognon also prints from a MS in his possession of Theodore bar Koni's *Liber Scholiorum* the story of Tammuz and Balthi (i.e. Adonis and Venus; see Addai Scher's edition of Theodore in *Corpus Scriptt. Chr. Orientalium: Scriptores Syri, Textus*, Ser. II, Tom. LXV, pp. 312–13), and recognizes that it must be drawn from some early Christian "Apology," but does not observe that his shrewd conjecture is fully confirmed by the version of the story given in the *Oration of Melito* (Cureton, *Spicilegium Syriacum*, p. 25 of text). Comparison of Theodore's version of this story and of his versions of the stories of "Zaradusht" (*ibid.* Tom. LXVI, p. 295, 17), of "Nebo" of Mabug, i.e. Hierapolis, and of "Baal and Ashtoreth" (*ibid.* Tom. LXV, p. 369, 11 and p. 204, 22) with the corresponding stories in "Melito" makes it quite certain that both authors are drawing from a common source. Since that source contained local legends (although they are rewritten from the syncretistic point of view prevailing in the Syro-Greek cities and are furnished with a Christian explanation), and cannot, I think, be dated much later than A.D. 200, it is worthy of more attention than it has yet received from students of the Syrian Goddess of Hierapolis.

[2] Artem. *Oneirocritica*, V, 93 (Paris, 1603, p. 269): *ἔδοξέ τις ὑπὸ τοῦ Σαράπιδος εἰς τὸν κάλαθον τὸν ἐπὶ τὴν κεφαλὴν κείμενον βεβλῆσθαι, ἀπέθανεν. Πλούτων γὰρ ὁ θεὸς εἶναι νενόμισται.*

have been the bond which prevented the soul's being dissipated, thus being supposed to perform for the soul the office which the coffin performed for the body. In the philosophical schools the need of such a bond was felt and various theories were advanced as to its nature. The earlier Stoics taught that the soul at birth is chilled by contact with the air and so acquires a "temper" which makes it an individual entity.[1]

From the time of Plutarch onward the doctrine that the spirit or divine element possesses a body analogous to that which is now termed the "ethereal" or "astral" body, or that it is wrapped in one or more such envelopes, occurs in many diverse forms. But, according to Iamblichus, in most of these theories this body or envelope is supposed to serve both as a means of protecting the spirit and also as a "vehicle" on which it ascends after death to the upper regions.[2] Thus in these later theories the ethereal body performs both of the functions originally symbolized separately by the basket and the eagle.

The artist of the chalice has taken these two pagan symbols, the eagle and the basket, and has utilized their pagan significations for the conveyance of a specifically Christian doctrine. The eagle with uplifted wings represents the soul on the point of taking flight for heaven, precisely as it does on the pagan tombs. The basket, which might signify either the soul itself or the soul's celestial food, he has taken in the second sense, and has at once determined the sense in which it is to be understood and given it a specifically Christian meaning by filling it, not with invisible aether, but with eucharistic loaves, and by placing on either side a bunch of grapes. For the Christian derives his spiritual food, not from aether, but from the Eucharist.

Furthermore, consideration of the design raises a strong presumption that the eagle and basket are intended to symbolize some particular doctrine in connection with the Eucharist. The younger figure of Christ, portrayed as proclaiming the new dispensation, probably symbolizes St. Paul's "Christ according to the flesh" (2 *Cor.* 5, 16), while the elder, with the eucharistic symbols at his right hand and the wistful lamb beside him, signifies the risen or heavenly Christ feeding the Church with the spiritual food of the Eucharist. The introduction of another eucharistic symbol, the basket and grapes, in such close conjunction with the preceding,

[1] Plotinus, *Ennead.* IV, 7, 11; von Arnim, *Vet. Stoic. Frag.* II, §804; Nemesius, *De Nat. Hom.* Matth. pp. 70–71. Cf. Plut. quoted above, p. 368.

[2] Iambl. *De Anima* ap. Stob. *Ecl. Phys.* p. 926 Heer.; I, 385, 3 Wachsm. *Οἱ μὲν γὰρ εὐθὺς αὐτὴν τὴν ψυχὴν αὐτῷ τῷ σώματι τῷ ὀργανικῷ συνοικίζουσιν, ὥσπερ οἱ πλεῖστοι τῶν Πλατωνικῶν· οἱ δὲ μεταξὺ τῆς τε ἀσωμάτου ψυχῆς καὶ τῆς ἀγγελιώδους* [l. *ἀγγειώδους*, c' I, p. 464, 8 W] *αἰθέρια καὶ οὐράνια καὶ πνευματικὰ περιβλήματα περιαμπέχοντα τὴν νοερὰν ζωὴν προβεβλῆσθαι μὲν φρουρᾶς ἕνεκεν, ὑπηρετεῖν δὲ αὐτῇ καθάπερ ὀχήματα, συμμέτρως δ' αὖ καὶ πρὸς τὸ στερεὸν σῶμα συμβιβάζειν μέσοις τισὶ κοινοῖς συνδέσμοις αὐτὴν συνάπτοντα.*

must then have a more definite meaning than a mere general allusion to the benefits received from the Eucharist.

Its connection with the eagle, a symbol of the immortal soul, sufficiently intimates the meaning which the artist intended to convey. It is well known that many early Christian writers teach that there is a definite, causal connection between the reception of the Eucharist and the attainment of eternal life. It is not merely that the spiritual food received in the Eucharist aids in a general way in living the Christian life and in the attaining of its end, but that the reception of the elements contributes directly and specifically to the attainment by the individual of immortality.

Language suggesting this doctrine will be found in the Gospel of John. For example (6, 51), *ἐγώ εἰμι ὁ ἄρτος ὁ ζῶν ὁ ἐκ τοῦ οὐρανοῦ καταβάς· ἐάν τις φάγῃ ἐκ τούτου τοῦ ἄρτου, ζήσει εἰς τὸν αἰῶνα· καὶ ὁ ἄρτος δὲ ὃν ἐγὼ δώσω ἡ σάρξ μού ἐστιν ὑπὲρ τῆς τοῦ κόσμου ζωῆς.* (54) *ὁ τρώγων μου τὴν σάρκα καὶ πίνων μου τὸ αἷμα ἔχει ζωὴν αἰώνιον, κἀγὼ ἀναστήσω αὐτὸν τῇ ἐσχάτῃ ἡμέρᾳ.* But in view of such a parallel as (6, 40) *τοῦτο γάρ ἐστιν τὸ θέλημα τοῦ πατρός μου, ἵνα πᾶς ὁ θεωρῶν τὸν υἱὸν καὶ πιστεύων εἰς αὐτὸν ἔχῃ ζωὴν αἰώνιον καὶ ἀναστήσω αὐτὸν ἐγὼ ἐν τῇ ἐσχάτῃ ἡμέρᾳ*, and Jesus' explicit repudiation of a literal interpretation, (6, 63) *τὸ πνεῦμά ἐστιν τὸ ζωοποιοῦν, ἡ σάρξ οὐκ ὠφελεῖ οὐδέν· τὰ ῥήματα ἃ ἐγὼ λελάληκα ὑμῖν πνεῦμά ἐστιν καὶ ζωή ἐστιν*, I do not think that any weight should be placed upon it. Quite unambiguous, however, are the much quoted words of Ignatius, third (or second) bishop of Antioch, who suffered martyrdom at Rome not many years before or after 110: "Breaking one bread, *which is the medicine of immortality*, an antidote, that ye should not die but live in Jesus Christ for ever." [1]

Whether the immortality thus attained involves the resurrection of the material body or not is a question determined by the individual thinker's point of view. Irenaeus (about 185) believes that it does:

> For just as bread from the earth upon receiving the invocation of God is no longer bread but Eucharist, consisting of two things, an earthly and a heavenly, so also our bodies upon partaking of the Eucharist are no longer mortal, for they possess the hope of an eternal resurrection.[2]

Irenaeus' contemporary, Clement of Alexandria, frequently uses language which suggests this doctrine,[3] but his well-known habit of

[1] *Eph.* c. 20: *ἕνα ἄρτον κλῶντες, ὅ ἐστιν φάρμακον ἀθανασίας, ἀντίδοτος τοῦ μὴ ἀποθανεῖν ἀλλὰ ζῆν ἐν Ἰησοῦ Χριστῷ διὰ παντός.*

[2] *Adv. Haer.* IV, 18, 5 Mass.; Vol. II, pp. 205–8 Harvey: *ὡς γὰρ ἀπὸ γῆς ἄρτος προσλαμβανόμενος τὴν ἐπίκλησιν τοῦ θεοῦ, οὐκέτι ἄρτος ἐστὶν, ἀλλ' εὐχαριστία, ἐκ δύο πραγμάτων συνεστηκεῖα, ἐπιγείου τε καὶ οὐρανίου· οὕτως καὶ τὰ σώματα ἡμῶν μεταλαμβάνοντα τῆς εὐχαριστίας, μηκέτι εἶναι φθαρτὰ, τὴν ἐλπίδα τῆς εἰς αἰῶνας ἀναστάσεως ἔχοντα.* Compare also V, 2, 1–3 Mass.; Vol. II, 318–324 Harvey.

[3] E.g. *Paedagogus*, I, 6, 47 (p. 128 B; I, p. 118, 6 St.): *ὡς ἄρτος εἰς κρᾶμα καταθρυβεὶς τὸν οἶνον ἁρπάζει, τὸ δὲ ὑδατῶδες ἀπολείπει, οὕτως καὶ ἡ σάρξ τοῦ κυρίου, ὁ ἄρτος τῶν οὐρανῶν, ἀναπίνει τὸ αἷμα, τοὺς οὐρανίους τῶν ἀνθρώπων εἰς ἀφθαρσίαν ἐκτρέφων, ἀπολείπων δὲ μόνας ἐκείνας εἰς φθορὰν τὰς σαρκικὰς ἐπιθυμίας, οὕτως πολλαχῶς ἀλληγορεῖται ὁ λόγος, καὶ βρῶμα καὶ σάρξ καὶ τροφὴ καὶ ἄρτος καὶ αἷμα καὶ γάλα, ἃ πάντα ὁ κύριος εἰς ἀπόλαυσιν ἡμῶν τῶν εἰς αὐτὸν πεπιστευκότων.*

using language in an allegorical rather than the apparent literal sense forbids one's interpreting him quite literally.

The *Acts of Judas Thomas* were originally written in Syriac, probably in Antioch in the early years of the third century. While not strictly gnostic, they are deeply tinged with Valentinian ideas, and the numerous changes which have been made in both the Syriac text and the Greek translation by orthodox copyists have so obscured the author's beliefs that it is not possible to pronounce upon them with confidence. It is, however, quite clear that he conceives of a special relation between the Eucharist and immortality, and he probably regards the immortal life as spiritual in character. On one occasion the Apostle begins the prayer of consecration as follows: "Living Bread, the eaters of which die not! Bread, that fillest hungry souls with thy blessing! Thou that art worthy to receive the Gift and to be for the remission of sins, that those who eat thee may not die" (Wright's translation, with typographical changes).[1] The term "medicine of life" (*sam khayye*), which is obviously equivalent to Ignatius' "medicine of immortality," occurs with unmistakable eucharistic reference in one passage of the Syriac text which is not found in the Greek: "Blessed art thou, Beloved Son, who hast made our deadness to live and our wandering to return back again, and hast become to us the medicine of life by thy life-giving body and by the sprinkling of thy living blood." [2]

The same term occurs in a similar passage in the Greek text: "Tertia, thou hast not yet heard the herald of life, not yet has it fallen on thy ears, not yet hast thou tasted the medicine of life." [3]

About the middle of the third century this idea is expressed by Cyprian, bishop of Carthage, but I have not found it in other writers of that period.[4] But in the fourth and early fifth centuries it is of frequent occurrence. Among the Greek writers who teach it are Macarius Magnes, Athanasius, Gregory of Nyssa, Chrysostom, Theodoret and Cyril of Alexandria; among the Latin, Firmicus Maternus, Ambrose, Augustine and Optatus.[5]

[1] W. Wright, *Apocryphal Acts of the Apostles*, (London, 1871, 2 vols., Syriac and English) I, p. 302, 1–4; II, 268: Lipsius & Bonnet, *Acta Apostolorum Apocrypha*, Leipzig, 1891–1903, II, pt. 2, p. 240, 6–10. The Syriac origin of these Acts was first proved by Prof. Burkitt, *J.T.S.*, I, 2 (Jan. 1900), pp. 280–90. In the passage above quoted the Greek and the Syriac texts are virtually the same.

[2] Wright, I, p. 281, 18–21; II, p. 248.

[3] Lipsius-Bonnet, II, 2, p. 241, 20: Ὦ Τερτία, *οὐδέπω ἤκουσας τοῦ κήρυκος τῆς ζωῆς· οὐδέπω ταῖς σαῖς προσέπεσεν ἀκοαῖς· οὐδέπω ἐγεύσω τοῦ τῆς ζωῆς φαρμάκου.*

[4] *De Dom. Orat.* 18 (quoted by P. Batiffol, *L'Eucharistie, la Présence réelle et la Transsubstantion*, 5me ed. Paris, 1913, p. 234): *Quando ergo dicit in aeternum vivere si qui ederit de eius pane, ut manifestum est eos vivere qui corpus eius attingunt et eucharistiam iure communicationis accipiunt, ita . . .*

[5] *The Apocriticus of Macarius Magnes*, translated by T. W. Crafer, D.D. (MacMillan, 1919), Ch. 15, p. 84 (I have not been able to procure a copy of the Greek text): *But the earthly body which is named the body of God led those who ate into life eternal, and Christ gave indeed His own body and blood to those who believe, by inserting*

But the best illustration of the meaning of the Chalice symbol is supplied by Ephraim the Syrian, who spent the greater part of his life at Edessa and died near that city in 373. The passage occurs in *Hymni Azymorum*, No. 17.[1]

ܕܬܡܢ ܦܓܪܐ ܐܕܡ ܬܪܝܢܐ.	Because there "the body is," the Second Adam,
ܠܘܬܗ ܡܬܟܢܫܝܢ ܢܫܪ̈ܐ ܦܪ̈ܚܐ ܀	To it are gathered the winged eagles:
ܒܠܚܡܐ ܪܘܚܢܐ ܗܘܐ ܟܠ ܐܢܫ	*By the spiritual bread each man becomes*
ܢܫܪܐ ܕܡܛܐ ܠܓܘ ܦܪܕܝܣܐ ܀	*An eagle that arrives in Paradise:*
ܡܢ ܕܐܟܠ ܠܚܡܗ ܚܝܐ ܕܒܪܐ.	Whoso eats the living bread of the Son,
ܗܘ ܦܪܚ ܠܐܘܪܥܗ ܐܦ ܒܥܢ̈ܢܐ ܀	He flies to meet Him, even in the clouds.

Another striking passage shows how the ancient doctrine of the local pagan cult, that the soul is nourished by fire or aether, still survives as Christian metaphor:[2]

ܕܚܕ ܦܬܬܐ ܡܢ ܦܪ̈ܬܘܬܗ܆ ܠܐܠܦ ܐܠܦܝܢ ܡܩܕܫ.
ܘܣܦܩ ܗܘ ܠܟܠܗܘܢ ܘܚܝܐ܆ ܕܢܗܘܐ ܚܝ̈ܐ ܠܐܟܘܠܘܗܝ.
ܣܒܘ ܐܟܘܠܘ ܒܗܝܡܢܘܬܐ܆ ܘܠܐ ܬܬܦܠܓܘܢ ܕܗܢܘ ܦܓܪܝ܀
ܘܕܐܟܠ ܠܗ ܒܗܝܡܢܘܬܐ ܢܘܪܐ ܘܪܘܚܐ ܐܟܠ ܒܗ
ܘܕܡܬܦܠܓ ܘܐܟܠ ܠܗ. ܠܚܡܐ ܦܫܝܛܐ ܗܘ ܠܗ܀

Of its crumbs one, [as] Preserver, sanctifies a thousand thousands,
And suffices for them all. That it may be Life to you who eat it,
Take, eat in faith, and doubt ye not that this is my body,
And whoso eats it in faith, *eats fire and spirit in it,*
And whoso eats it doubting, to him it is simple bread.

Only one of the writers above mentioned, Gregory of Nyssa, advances an explanation of the life-giving virtue of the Eucharist in terms of contemporary science, but, since it has no bearing on the problem of the eagle and the basket, I need not now discuss it.[3]

In the works attributed to Macarius of Egypt, however, a theory is set forth in which the ancient Syrian conceptions which Ephraim, as he himself elsewhere explains, uses in a metaphorical sense, recur in substantially their original form. God transforms himself into

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the life-giving medicine of His Godhead . . . the bread that is tilled in the blessed land of Christ, being joined with the power of the Holy Spirit, at one taste gives a man immortality. For Theodoret see *Interp. Epist. ad Heb.* c. X (P.G. 82, col. 752). For the other authors, quotations and references will be found in the above cited work of Batiffol and in L. Thomassini, *Dogmata Theologica*, Ed. nova, Par. 1868, T. IV, lib. X, c. 31, pp. 474–9.

[1] *Sancti Ephraem Syri Hymni et Sermones*, ed. T. J. Lamy, Mechliniae, Tom. I, (1882) col. 619.

[2] *Op. cit. Sermo IV in hebdom. sanct.* I. col. 415.

[3] *Or. Cat.* c. 37. J. H. Srawley (*The Catechetical Oration of Gregory of Nyssa*, in *Cambridge Patristical Texts*, 1903, pp. xxxvi sq. and 135) and Batiffol (*op. cit.* 400–07) recognize the affinity of Gregory's theory with Aristotle's doctrine of nutrition and sustenance (*De gen. et corr.* I, 5). But I do not think Gregory knows Aristotle directly, for he uses none of Aristotle's precise technical terms, and the terms which he does use express Aristotle's ideas imperfectly.

a tenuous material substance similar to that of the soul in order to blend with it, either directly, or indirectly through the Eucharist. Thus God may assume the form of light or fire; He may manifest Himself to the soul in visions, as of the heavenly Jerusalem, or He may be immediately perceived as love, joy, and the like. Only when permeated and transfused by this spiritual substance does the body possess the capacity of resurrection.[1]

I have found it necessary to give this brief outline of a little known theory, not wholly appropriate to an archaeological journal, in order to show the essential identity of the ideas expressed to both Christian and pagan by the eagle and the basket, ideas belonging to that group of spiritualistic conceptions which in pagan thought developed into Neo-Platonism and in the Christian first into Gnosticism and later into the Christian philosophies of Clement, Origen and the later Greek Fathers.

In the second third of the fifth century the vivifying power of the Eucharist was one of the subjects of contention in the controversy between Cyril, who was archbishop of Alexandria 412 to 444, and Nestorius, who had been trained in the Antiochian school of theology and was archbishop of Constantinople from 428 until his deposition in 431. Cyril anathematized all who denied this doctrine and Nestorius anathematized all who accepted it,[2] and thus they brought it into prominence as one of the major doctrines of the Church. It is probably to this circumstance that we owe the two other symbolic expressions of this doctrine which I have been able to find. The ivory pyxis shown in Figure 8, now in the Museo Civico of Leg-

[1] *Macarii Aegyptii Opera*, ed. J. G. Pritius, Leipz. Two Vols., 1699, 1704. *Hom.* IV, cc. 9–13 (II, 47–53): e.g. p. 47, *ἐσωματοποίησεν ἑαυτὸν ὁ ἄπειρος καὶ ἀπρόσιτος καὶ ἀποίητος θεὸς. . . . ἵνα συνενωθῆναι δυνηθῇ τοῖς ὁρατοῖς αὐτοῦ κτίσμασιν, οἷον ψυχαῖς ἁγίων καὶ ἀγγέλων λέγω, ἵνα δυνηθῶσι ζωῆς θεότητος μετασχεῖν. . . .* (p. 48) *καὶ ἀναμίγνυται καὶ παραλαμβάνει τὰς ἁγίας καὶ εὐαρέστους καὶ πιστὰς ψυχὰς καὶ γίγνεται μετ' αὐτῶν εἰς ἓν πνεῦμα. . . .* (p. 50) *ἵνα ὁραθῇ αὐταῖς ὁ ἀόρατος καὶ ψηλαφηθῇ κατὰ τὴν φύσιν τῆς λεπτότητος τῆς ψυχῆς ὁ ἀψηλάφητος· καὶ αἴσθωνται αὐτοῦ τῆς γλυκύτητος, καὶ τῆς χρηστότητος τοῦ φωτὸς τῆς ἀῤῥήτου ἀπολαύσεως αὐτῇ πείρᾳ ἀπολαύσωσιν· ὅτε βούλεται πῦρ γίνεται, πᾶν φαῦλον καὶ ἐπείσακτον πάθος τῆς ψυχῆς κατακαῖον. . . . . . ὅτε βούλεται ἀνάπαυσις ἄῤῥητος. . . . . ὅτε βούλεται χαρὰ καὶ εἰρήνη. . . . . εἰ δὲ καὶ εἰς ἓν τῶν κτισμάτων ἑαυτὸν ἀφομοιῶσαι βούλεται. . . . .* (51) *οἷον ἡ πόλις φωτὸς Ἱερουσαλὴμ. . . . . καὶ εἰς βρῶσιν καὶ πόσιν. . . καθὼς γέγραπται ἐν τῷ εὐαγγελίῳ, ὁ τρώγων τὸν ἄρτον τοῦτον ζήσεται εἰς τὸν αἰῶνα. . .* (p. 52). *οὕτως ἑκάστῳ τῶν ἁγίων πατέρων ὤφθη ὡς ἠθέλησε κ. τ. λ.* (*Hom.* XI, Vol. II, p. 132) *τὸ πῦρ τὸ οὐράνιον τῆς θεότητος ὅπερ δέχονται οἱ χριστιανοὶ ἐντὸς αὐτῶν ἐν τῇ καρδίᾳ νῦν ἐν τῷ αἰῶνι τούτῳ, τοῦτο αὐτὸ τὸ ἐντὸς τῆς καρδίας αὐτῶν διακονοῦν, ὅταν ἀναλυθῇ τὸ σῶμα, ἐξώτερον γίνεται καὶ πάλιν συμπήσσει τὰ μέλη καὶ ποιεῖ ἀνάστασιν τῶν λελυμένων μελῶν.*

The attribution of these works to Macarius of Egypt (d. about 390) is disputed. Stiglmayr thinks the existing collection is a late compilation out of his works, with many interpolations; Flemming attributes them to one Macarius of Bostra, who lived in the early fifth century. For references to the literature see Ueberweg-Baumgartner, *Grundriss d. Gesch. d. Philosophie* (1915), II, p. 138–9; App. p. 64.

[2] Cyril. Alex. *Apol. cont. Theod.* No. 11 (*P.G.*, 76, col. 445): *εἴ τις οὐχ ὁμολογεῖ τὴν τοῦ Κυρίου σάρκα ζωοποιὸν εἶναι καὶ ἰδίαν αὐτοῦ τοῦ ἐκ Θεοῦ πατρὸς Λόγου. . . . ἀνάθεμα ἔστω.* Nestorius, *Anathem.* 11 (Loofs, *Nestoriana*, p. 216 quoted by Batiffol, *op. cit.* p. 473): *Si quis dixerit unitam carnem Verbo Dei ex naturae propriae possibilitate vivificatricem esse . . . anathema sit.*

horn, was found at Carthage and first published by De Rossi[1] who assigns it to the fourth or fifth century. Stuhlfauth refers both this pyxis and that of Vienna, of which I shall speak in the next paragraph, to the school of Murano, middle of the seventh century. Christ is shown multiplying the loaves and fishes; four disciples hold food under his outstretched hands for consecration; six others, two on one side and four on the other, hurry away with the consecrated food in their bosoms for distribution. The scene is eminently appropriate, since the pyxis was designed to contain the consecrated bread when reserved or carried to the sick. Not less appropriate, one may be sure, must be the large bird with uplifted wings depicted under the hasp, and, in the light of the evidence already presented, there can be little doubt that it is intended to represent an eagle and

FIGURE 8. IVORY PYXIS (FROM DE ROSSI IN *Bull. d. Arch. Crist.* 1891, TAV. IV–V)

signifies the immortality communicated by participation in the Eucharist. My friend Mr. Wharton Huber, of the Philadelphia Academy of Natural Sciences, who has been so kind as to study these representations of birds from the point of view of the trained ornithologist, informs me that, while those on the chalice and the Syrian tomb-reliefs are certainly eagles, that on the pyxis "is evidently intended for a griffon vulture (*Gyps fulvus*)." But this would not affect the interpretation, for, according to the popular belief, fish-hawks, vultures, and some other birds of prey which cannot be identified with certainty, were the degenerate descendants of eagles, and it seems to me more likely that the artist, whose lack of culture is suggested by the rudeness of his work, has assimilated the physical traits of his eagle to those of a bird with which he was more familiar, than that he has consciously tried to portray a vulture as distinguished from an eagle.[2]

[1] *Pisside eburnea Cartaginese* in *Bull. di Arch. Crist.* 1891, p. 47, Tav. IV–V. G. Stuhlfauth, *D. Altchristliche Elfenbeinplastik*, 1896, p. 128; Graeven, *Gött. gel. Anz.*, 1897, 76, 1; v. Sybel *Christliche Antike*, II, 252.

[2] Ps.-Arist. *De mirab. ausc.* c. 60, 834b35: ἐκ τοῦ ζεύγους δὲ τῶν ἀετῶν θάτερον τῶν ἐγγόνων ἁλιαίετος γίνεται παραλλάξ (i.e., in alternate broods?), ἕως ἂν σύζυγα γένηται. ἐκ δὲ ἁλιαιέτων φήνη γίνεται, ἐκ δὲ τούτων περκνοὶ καὶ γῦπες· οὗτοι δ' οὐκέτι διορίζουσι περὶ (i.e., do not constitute a separate species as against) τοὺς γῦπας, ἀλλὰ γεννῶσι τοὺς μεγάλους γῦπας· οὗτοι δ' εἰσὶν ἄγονοι.

The Carthaginian pyxis makes intelligible the signification of the "eagle," more properly vulture, carved upon another ivory pyxis which is, or was in 1909, in the Vienna Museum and is supposed to have been made in Syria about A.D. 550 (fig. 9).[1] As in the Carthaginian pyxis, the eagle is placed beneath the hasp. This position, then, is not accidental; either both designs go back to a common archetype or both symbolize the same idea, some such idea as that of the Eucharist being the key to immortality. To the right of the eagle stands a figure with right hand uplifted, suggesting an *orante*, but the left is enveloped in the folds of the garment. Kehrer can find no satisfactory meaning either for this figure or for the eagle.[2]

FIGURE 9. IVORY PYXIS (FROM H. KEHRER *D. heil. drei Könige*, FIGURE 40)

I venture to think that it is in fact an *orante*, symbolizing the soul which derives its immortality from the Eucharist within the pyxis. The peculiar position of the left hand may be explained as due to the exigency of the space; if the figure is to be kept on the same scale as the others there is no room for an uplifted left hand. On the opposite side of the pyxis is the Madonna and Child enthroned; to the left of the eagle the Child in the cradle with Salome and the beasts, to its right the Magi. The association of the Nativity

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Pliny, *Hist. Nat.* X, 3 (quoted from *Zoologie de Pline*, text and translation, with notes by Cuvier, Paris, 1831): *Haliaeti suum genus non habent, sed ex diverso aquilarum coitu nascuntur. Id quidem, quod ex iis natum est, in ossifragis genus habet, e quibus vultures progenerantur minores: et ex iis magni, qui omnino non generant.*

Cuvier (pp. 370–72) thinks that the περκνός is the small eagle, the φήνη and the *ossifraga* are the same bird, namely the *lämmergeier.*

[1] Hugo Kehrer, *Die heiligen drei Könige in Literatur und Kunst*, Leipzig, 1909, II, p. 54. Kehrer refers to two earlier publications, E.v. Sacken in *Jahrbuch (Mitteilungen) der Kaiserlich-Königlichen Central-Commission zur Erforschung und Erhaltung der Baudenkmale*, 1876, N. F. Jhrg. II, p. 48, and M. Schmid, *Die Darstellung der Geburt Christi in der bildenden Kunst*, Stuttgart, 1890, p. 120, neither of which is accessible to me. Kehrer gives four illustrations of the pyxis (figs. 38–41) of which I reproduce one only (no. 40). See also Stuhlfauth, *op. cit.* p. 126, and Rohault de Fleury, *La Messe* V, 373. Stuhlfauth assigns this also to the school of Murano.

[2] *Op. cit.* p. 55: *Wer die Stehfigur neben dem Adler sein soll, ist schwer zu sagen. Ein Hirte kann es nicht sein, dagegen spricht schon die Gewandung; der wegweisende Sternengel? Dann hätte er seinen üblichen Platz nicht inne, auch müsste er im siebenten Jahrhundert mit Flügeln dargestellt sein. Vielleicht ist an eine Begleitfigur der Madonna zu denken.* He makes no other reference to the eagle. Stuhlfauth regards the eagle as merely decorative.

with a eucharistic pyxis and with the eagle, a eucharistic symbol, is probably to be explained by the doctrine that the presence of Christ in the Eucharist is to be conceived as a continuance of the incarnation, a conception which became prominent during[1] the Christological controversies of the fifth century.

More doubtful is the interpretation of the central design of the splendid mosaic pavement, measuring six by eight metres (Fig. 10), discovered in the ruins of the fourth century church at S. Maria di Capua Vetere, about three miles south of the modern town of Capua, and published by Domenico Salazaro.[2] The church was rebuilt about 450 by Symmachus, bishop of Capua, and it is to this period that Salazaro would refer the mosaic. Of the bird and fish in the central circle Mr. Huber says: "It is surely the fish hawk, or osprey, or, as it was known in early times, the ossifrage (*Pandion haliaetus*). The fish is the red mullet or goat fish, the most prized of all fishes in the old days, the fish of Kings' feasts." But, since Pliny expressly reckons the fish-hawk as a species of eagle, and since the fish is one of the earliest and most familiar symbols of Christ, especially as received in the Eucharist, there is no difficulty in interpreting the group after the analogy of the chalice group as a eucharistic symbol. An alternative interpretation, however, cannot be excluded. The fish-hawk is preëminently a fisherman, and any one who has repeatedly seen him, as Pliny evidently had seen him and as I have seen him myself during this past summer, drop like a stone from a height of fifty to a hundred feet, dive head foremost under the surface of the water and emerge with a fish in his talons, will habitually think of him in that capacity. And, since in the catacomb paintings fishing with rod or net is a well known symbol of Baptism, it is quite possible that the fish-hawk and

FIGURE 10. MOSAIC PAVEMENT (FROM SALAZARO, *Studi*, ETC., OPP. P. 46)

[1] For this doctrine see Thomassini, *op. cit.* Vol. IV, lib. x, c., 22, and Batiffol, *op. cit.* p. 399, 454 *sqq.* Both trace it back to the *de Trinitate* of Hilary of Poitiers, written, according to Batiffol (p. 399, n. 2), between 356 and 359.

[2] *Studi sui monumenti della Italia Meridionale dal IV° al XIII° secolo*, Napoli, 1871, p. 46. See also Cabrol, *Dict.* II², col. 2073 and fig. 2054. Garrucci, *Storia* Vol. II, pt. 2, pl. 277, 1.

fish is another mode of expressing the same idea. The four chalices in the corners, each accompanied by a pair of doves and a few growing plants, should in that case probably be taken as symbolizing the other chief sacrament, the Eucharist, together with the souls which are benefited thereby and the *refrigeratio* which they enjoy in Paradise, although the chalice-and-doves occurs on even pagan monuments as a merely decorative element.

Salazaro and Garucci (*Storia*, Vol. IV, p. 94) regard the group as forming a baptismal symbol and I incline to the same interpretation. Garucci compares with it the eagles represented on a mosaic of Valence (pl. 277, 2) as defending a lamb and a hare from the attacks of crows, which he interprets, correctly I think, as symbolizing the protection against sin obtained through baptism.[1]

The eagle-and-basket symbol is, then, probably of Syrian origin and signifies the widely accepted doctrine that immortality, and in particular the possibility of resurrection in bodily form, is acquired by participation in the Eucharist. This doctrine was taught in the Church of Antioch before the end of the first century and must have originated still earlier. But the fact that it was so generally accepted throughout the early centuries forbids one's taking its expression on the holder as throwing any light upon the date of the latter.

One may, however, ask whether the symbols used to express the doctrine supply any clew to the date.

The basket, representing the bread of the Eucharist, is one of the oldest of Christian symbols; it occurs in the catacomb of Priscilla in the earliest of eucharistic pictures, referred by Wilpert to the beginning of the second century. The combination of the basket with bunches of grapes, as symbols of the wine, does not, so far as I can discover, occur elsewhere than on the chalice.

The eagle, however, has not been found in Christian art prior to the fourth century, and is conjoined with eucharistic symbols nowhere except on the two pyxides which I have described and, possibly, on the Capuan mosaic. None of these is earlier than the fifth century, but the evidence of Ephraim proves that the association was known, in Syria at least, before 373.

It is not difficult to understand the repugnance which Christians must have felt for the eagle as a symbol. In the first place, it was the most familiar symbol of the hated, persecuting Empire, and, in the second, it was itself a pagan idol. The eagle perched upon the standard of the Roman legion was the soldiers' peculiar divinity;

[1] Quite certainly symbols of the resurrection are those birds, more or less resembling eagles, which occur on later monuments in connection with the resurrection of Christ (Garucci, pl. 353, 1; Le Blant, *Les Sarcophages Chrétiens de Gaule*, pl. 55, 1: Garucci, pl. 401, 2, 3, 4) or on coffin lids (Cabrol, II, 2, col. 3280, fig. 2354; col. 1578, fig. 1857).

to it sacrifices were offered and by it the most sacred of oaths was ratified.[1] This fact supplies a negative datum of some importance for the date of the holder. There were, no doubt, at all times individual Christians who did not feel that detestation of paganism which throughout the ages of persecution flames out in the pages of the Apologists, but it is improbable that at any time during that period of 250 years, while the Empire still appeared to the majority of Christians as "the beast that ascendeth out of the bottomless pit" (*Apoc.* 11, 7) and as "the great whore that sitteth upon many waters," "drunken with the blood of the saints and with the blood of the martyrs of Jesus" (*ib.* 17, 1 and 6), the responsible authorities of a great church would have permitted a very "image of the beast" (*ib.* 13, 14) to be placed upon the "cup of blessing which we bless," which is "the communion of the blood of Christ" (*I Cor.* 10, 16).

The holder would, then, probably belong either to the earliest period of the Church's history, before the issuance by Nero of the edict of 64, while Christianity, as a Jewish sect, was still a protected religion, while Paul, the Roman citizen, could still appeal to Caesar from the corrupt judgment of a local court and could still declare to Roman Christians that the powers that be "are not a terror to good works but to the evil" (*Rom.* 13, 3), or, to the age of peace which followed the edict of Milan in 313, when the monogram of Christ had replaced the eagle on the soldiers' standards (Euseb. *Vit. Const.* I, 31, 3) and the Imperial Government had recognized the Christians' God.

With the cessation of the fear, the detestation which paganism had inspired was largely assuaged, and Christians seem to have offered little resistance to the introduction of many pagan ideas and practices by the multitudes of half-converted or unconverted pagans who made haste to join a Church which enjoyed the favor of the Emperors. It is probable that the eagle could have been used as a Christian symbol at any time after the middle of the fourth century without giving general offence.

The decision between these two dates must be based upon considerations which do not belong to my field.[2]

WM. ROMAINE NEWBOLD

THE UNIVERSITY OF PENNSYLVANIA

[1] Tert. *Apol.* c. 16 (ed. Oehler, I, p. 178): *Religio Romanorum tota castrensis signa veneratur, signa iurat, signa omnibus deis praeponit.* See the passages quoted by Oehler in his note; e.g., Livy XXVI, 48 couples *signa militaria et aquilas,* and Tacitus, *Ann.* XIV, 16, speaks of eagles as *Romanas aves, propria legionum numina.*

[2] In a popular article written by request for *The Ladies' Home Journal* (Nov. 1924) I have shown that some of the peculiar features of the chalice design, especially the two groups of five each and the asymmetrical position of the second basket, may be plausibly explained by reference to the relations subsisting between the Churches of Antioch and of Jerusalem about the year 50 as described by Luke, and that the ideas expressed by the chalice symbols strikingly resemble those of Ignatius of Antioch.

Ivory statuette from Corinth. Actual size

PLATE IV

EXCAVATIONS AT CORINTH IN 1925

PLATE IV

A PRELIMINARY report is here given of excavations made at Corinth in the spring of 1925 by the writer under the general direction of Dr. B. H. Hill, Director of the American School of Classical Studies at Athens. This is a continuation of American archaeological work at Corinth that was initiated by the late Dr. R. B. Richardson in 1896 when he was director of the school. In occasional campaigns since that time important and impressive monuments of ancient Corinth have been uncovered, but the progress of the excavations has always been checked because of limited financial support. It has been the aim of the excavators to discover and identify the buildings mentioned by Pausanias. This aim has often been successfully achieved, but in some instances, after the ascertainment of topographical evidence, available resources were not sufficient for complete clearance of the terrain. This was true of the theatre the site of which was located in the first campaign at Corinth. At that time several trenches dug in the area revealed seats and stairways, and provided evidence for the existence of the Greek theatre and its reconstruction in Roman times. A detailed report of the results attained by these trial trenches was published by Frank Cole Babbitt in this JOURNAL (I, 1897, pp. 481 to 494). Additional work on a small scale was conducted on the theatre site by Richardson in 1902, by Dr. T. W. Heermance in 1903 (*A. J. A.* VII, 1903, p. 350), and by Dr. Hill in 1908 and 1909. As the deposit of accumulated earth is very deep on this part of the site, and as no convenient place for dumping exists in the neighborhood the mass of earth from all these trial trenches was banked beside the excavation with the result that the theatre area has, for some time, been an unsightly section of the excavations. When, therefore, opportunity arose for resumption of work at Corinth on a fairly large scale an obvious duty suggested the removal of these ugly excrescences and a further attempt to uncover, at least, some essential parts of the structure of the theatre.

After preparatory arrangements had been made by Dr. Hill work was begun by me on March 9th and continued until my departure on the 7th of June. Subsequently for three weeks under the supervision of the Director some of the heaps of earth from the old trenches were removed. From May 8th to the 26th C. A. Robinson of the American School assisted at the work. A total of 12,740 car-loads, each containing half a cubic meter of earth, was cleared from the theatre area during the season. The process of clearance here is slow as the earth must be carried for disposal for a distance

something more than four hundred meters. At this distance northwest of the theatre is a cliff, along the top of which the mediaeval fortifications and, perhaps, the ancient wall of the city were placed. Below this cliff is a space for dumping purposes admirably suited to accommodate all the earth that will be removed from the theatre and from any adjacent buildings that may be excavated. At the beginning of the season it required three weeks' time to lay the track from the cliff to the theatre, for, on approaching the theatre, walls of late houses were encountered, which were carefully cleared on both sides of the proposed route in order that nothing of importance

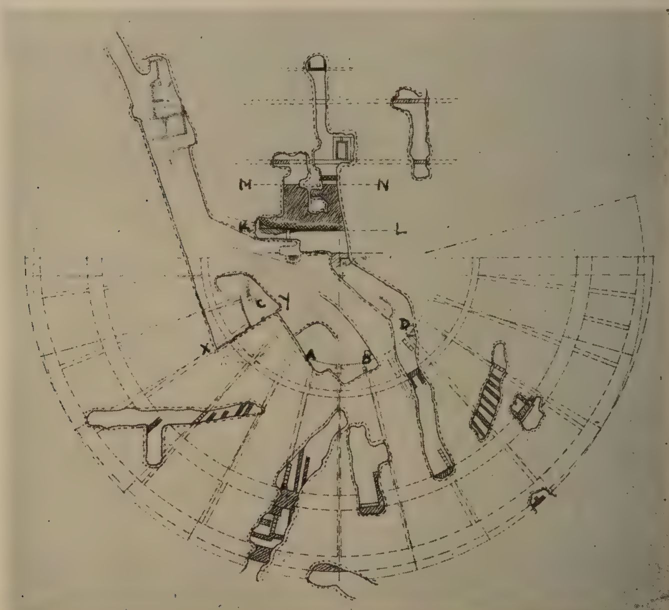

Figure 1. Plan of Theatre Showing Recent Excavations

should be disturbed. Simultaneously the land to be covered by the projected dump was thoroughly probed for any traces of ancient remains. The direction of the approach of the track determined approximately the place where the excavation of the theatre should begin, and it was hoped that by digging down to the lower rows of the cavea within the hypothetical position of the west parodos some point of identification would soon appear, on which an extension of the work could be based. As the excavation proceeded on a downward slope to an ultimate line marked XY on the plan reproduced in Figure 1, from a drawing by Richard Stillwell after an earlier plan by W. B. Dinsmoor, it was apparent from the loose earth and innumerable small stones and the heterogeneous nature of antique objects that we were dealing with an artificial

"fill." The earth was evidently turned over at different periods, and, in part, may have been carried here from some distance; for at the bottom of the excavation were many late Roman coins and sherds, and even some pieces of Byzantine pottery, while close to the surface were found archaic Greek terra-cottas and two objects of the prehistoric period, a flint tool and a small marble female idol in sitting posture. Apart from the coins, which were carefully studied and catalogued by Mrs. Agnes Baldwin Brett, the most numerous finds were small archaic terra-cotta horses, both with and without riders, doves, deer and female heads and busts. These are similar to the terra-cottas previously found in the theatre and published

FIGURE 2. PAINTED WALL OF THEATRE IN PROCESS OF EXCAVATION

in this JOURNAL by Richardson (II, 1898, pp. 206 ff.). No part of the structure of the theatre remained in the west end of this section and hard-pan was reached at point X on the plan, at a depth of 4.65 meters below the surface of the ground. On the east side a thin wall of stucco came to light, below which were some stone blocks on one of which a facing of blue stucco was preserved, but the significance of this discovery was not apparent until further developments had occurred in the excavations.

In order to maintain a bank for the later extension of the track to the centre of the cavea, operations were transferred to the southeast and digging was pursued along the eventual line marked A-B on the plan, with the aim of reaching ultimately the floor of the orchestra which might be expected to be more or less *in situ*. At a depth of about ten meters below the surface a bank of hard-pan appeared, of which the front was covered with painted stucco. This wall, as far as it has been excavated, is preserved to a height of 1.70 meters,

starting from the level of the orchestra. It is cut by an opening one meter wide exactly in the centre of the curve, opposite the supposed line of the stage building. The wall was cleared for a distance of seven meters on either side of the central passage. The section on the left side, as seen from the orchestra, is shown in Figure 2. At the left end the wall passes under the bank of earth, which still serves as a causeway for the track and could not be removed during the present season. On either side of the opening gladiatorial scenes are painted, which represent in each case groups of two men engaged in combat with a lion. The life-size figures are painted against a blue background, and the whole frieze is framed by three decorative bands of varying widths and contrasting colors. Below the blue field is a band of yellow, horizontally differentiated in shade, with the lighter shade above. This color is undoubtedly intended

FIGURE 3. EAST SECTION OF PAINTED WALL IN THEATRE. LENGTH 3.5 M.

to suggest the sand of the arena on which the contestants are standing, and the manipulation of the tones of color gives a real sense of depth and perspective to the scene. The figured frieze is bordered by a narrow band of blue of a deeper shade than the blue of the background, and this, in turn, is separated by a strip of pink from the deep red outer border. At each end of the wall adjoining the central passage the triple-colored border makes an angle and extends vertically up the face of the wall. No stucco has yet been found on the sides of the passage. At the end of the wall on the left of the opening a man is standing with his back to the spectator, as may be seen in Figure 3 which is reproduced from a water-color by Mrs. Shear. Owing to the ancient cutting away of the top of the wall, and the injury here to its face, most of this figure has disappeared, but enough remains to show that the man is standing, with his legs far apart and his left knee bent, in an attitude of intense action, as he is engaging in combat with a lion charging on him from the left. He is wearing a long purple undergarment on which is superimposed a white garment that is fastened by a decorative knot on the side of the left knee. He wears high crimson boots, and apparently an

end of the drapery is hanging down from the outstretched left arm which held a shield or sword, as presumably a spear was being brandished in the right hand. As this man wears long garments instead of the short clothes of the other contestants, and as he has a purple costume it is evident that he is a magistrate or some official in charge of the games. He is, nevertheless, taking an active part in the combat, in contrast to the quiet stationary attitude of the director of games painted on a similar wall surrounding the amphitheatre at Pompeii (Overbeck, *Pompeii*, 4th. ed. p. 182, fig. 107). To the left of this officer comes a huge tawny lion in violent rush with both forepaws raised from the ground, Figure 4, which is followed behind

Figure 4. Section of Painted Wall. Length 3.5 m.

by an attacking gladiator. This man is poised in a position that would indicate that he is about to hurl a spear at the lion. He is clad in a short garment, painted in a mottled red and white pattern, that suggests the skin of a beast. His thighs and legs, which are bare, are given a copper-colored shade, suitable for representing the exposed skin of athletes. Below the right knee he has a white band, and white sandals are fastened on his feet with red thongs.

The section of wall of equal length, uncovered on the right side of the central passage, is decorated in the same color scheme with a group of two gladiators and a lion, but here the figures are differently arranged. The first man, next to the vertical edge of the wall, is running to the spectator's left, and apparently away from the combat, which the gladiator behind him is waging with a lion that advances on his left. These men are each dressed in one short garment, like the gladiator on the other wall, but it is white and not mottled in color. They wear white sandals with red thongs and have white bands below the knees. The representation of the leg muscles of the first combatant and the indication of tense activity in his pose are admirably executed, and suggest the hand of a skilful painter working from familiar models.

The central passageway runs south for one meter and opens into a small chamber, with approximate demensions of one meter by

three, constructed of poured cement, Figure 5. As the cement roof began to show cracks and there was danger of its collapse from the weight of the mass of earth above it, this chamber could not be thoroughly explored and was supported with blocks of stone until the earth above could be removed. In the passageway many bones of cattle were found and several pins of bone and ivory, lying intermingled with ashes of burned wood. It is possible that this small room was used for storage purposes, or for the temporary enclosure of beasts destined for combats, like the small rooms opening from the arena of the amphitheatre in Pompeii (Overbeck, *Pompeii*, 4th ed. p. 179, fig. 103; Mau-Kelsey, *Pompeii*, p. 209). Besides uncovering the painted wall for a total length of fourteen meters, trial digging proved its preservation on a uniform curve in three other places, including the stuccoed block found in the first trench. The architect, Mr. Stillwell, was, therefore, able to take accurate measurements, which show that the wall is on the circumference of the orchestra circle, with a diameter of 36.80 meters. On the north side this circle is tangent to a wall, marked M-N on the plan, Figure 1, which apparently is the back wall of a structure, of which the front wall, K-L, is tangent to a circle with the same centre, which is the hypothetical circumference of the orchestra of the Greek theatre, as determined by Mr. Dinsmoor on the evidence of the converging kerkides of the cavea. The front wall was discovered by Dr. Heermance in 1903, and near it were several coping blocks, evidently from the top of the wall, which project at the top to protect the stuccoed face below. This wall, surmounted by two blocks, is shown through the excavation cut on the right of Figure 6. The painted surfaces of the separate blocks and the traces of painting on the front of the wall are exactly similar in color scheme to the painting on the circumference wall, so that both walls probably form part of the same building, but it is futile to discuss the nature of this structure before the total clearance of this area, which will be the aim of next season's campaign. But interesting evidence for the durability of the colors is afforded by the fact that, although some of these blocks have been exposed to the weather for twenty-two years, the paint is as bright as on the newly excavated section. After the architectural determination of the circumference of the painted wall it appeared that the thin stuccoed wall, found in the

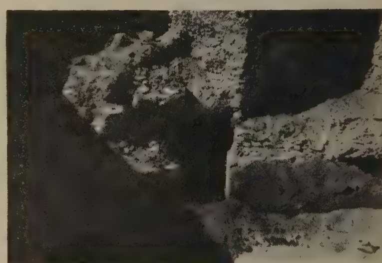

Figure 5. Central Passage Through Painted Wall of Theatre

first trench, is set back just three meters from the edge of the great wall on top, and is built on a curve concentric to it. When the significance of the upper wall had thus been ascertained, careful scraping with a knife revealed that beneath a superficial coating of lime its surface is entirely covered with designs painted in red on an orange background. Investigation of this wall was, also, necessarily postponed until next season, but apparently on top of the wall with the combat scenes a space was left for the accommodation of dignitaries in separate chairs, who would, thus, be separated from the mass of spectators, whose seats would rise behind the second wall, and would be protected in front by a metal grill set along the

FIGURE 6. EXCAVATIONS IN FRONT OF STAGE OF THEATRE. VIEW FROM SOUTH

edge of the top of the wall, as was done for a similar arrangement in the colosseum at Rome.

As the structure to which the painted wall belongs is built on the lines of the ancient Greek theatre, its history may be tentatively suggested. When the new colonists began to rebuild the city after the decree of 46 B.C. they used, as far as possible, the remains of former buildings. Although the theatre had been destroyed by Mummius, according to the statement of Vitruvius (*De architectura*, V, 5, 8) its structural elements were evidently still available, but the plan of the lower part was altered to provide an arena suitable for gladiatorial contests, as was done in the theatre at Assos (Dörpfeld und Reisch, *Das griechische Theater*, pp. 149 and 150). This alteration was accomplished by removing some of the lower rows of seats, and by cutting back the slope of the hill into the living rock to form a wall nearly three meters high, which would protect the spectators from the savage beasts, and would, at the same time, pro-

vide much more space for the arena. With a liberal allowance of time for building activity in the restored city the date of this construction might be reasonably placed between 25 B.C. and 25 A.D. Subsequently a Roman theatre was built above this structure, with a different centre for the orchestra and with a steeper rise to the seats. As Herodes Atticus, in the second century A.D., erected the covered odeion above the theatre (Philostratus, *Vita Sophist.* II, 1, 5, p. 237), it is possible that the reconstruction of the theatre itself was effected at the same time. This remarkable polychromy is not mentioned by Pausanias and may have been invisible at the time of his visit. But before it was covered from sight some mischievous

FIGURE 7. EXCAVATIONS IN ORCHESTRA OF THEATRE IN FOREGROUND, AND SITE OF ATHENA TRENCH IN LEFT BACKGROUND

boy scratched crudely in the stucco a bird with long feathers standing in front of the charging lion on the left wall, and perhaps printed his name a little higher on the wall, where some Greek letters are visible. The major task of next season's campaign will be the clearance of the remainder of this wall, which is still buried for a length of approximately eighty meters.

When Pausanias describes his visit to the theatre section of Corinth he specifically states that close to the theatre was located the sanctuary of Athena Chalinitis (II, 4, 5). As this was a famous sanctuary intimately associated with the legends and history of Corinth the discovery of its site should be important archaeologically as well as topographically. On this quest, therefore, a trench was begun on April 8th southeast of the theatre, extending east and west for twenty-five meters along the north side of the Sicyon road. The trench was kept at a width of five meters at the top, and even-

tually extensions were made to the north at both the eastern and western ends. From April 22d to the end of the season Oscar Broneer, a student of the American School, was in charge of the work in this trench. Figure 7 shows the relation of the excavation in the theatre, in the foreground, to the dump of the trial "Athena trench", which appears in the upper left corner, and behind which, to the left, are the columns of the temple of Apollo. Although the position of the sanctuary has not yet been demonstrably located sufficient remains were found to prove the proximity of a temple, and, consequently, to justify the continuation of excavations in the same neighborhood next year.

FIGURE 8. IONIC COLUMN FROM ATHENA TRENCH

Near the surface of the ground a late wall was uncovered which ran longitudinally for about thirteen meters before turning south. In this wall, which was partially removed, Byzantine coins and sherds and two bowls of Turkish pipes were found. At its eastern end was a large dump of marble fragments, which evidently had been broken up for conversion into lime. Some of the pieces were badly burned but most of them showed no traces of fire. The most interesting among the many architectural and sculptural fragments are pieces of a colossal female statue of the Roman period, which have remains of red paint, covered by gilding. Beneath the late wall and the marble dump appeared heavy foundation blocks of an earlier building with an east-to-west orientation. Near the east end of the trench this wall turns north, and in it are built three square bases, which may have been foundations for Ionic columns, as parts of an Ionic column of good Roman workmanship were found near by, Figure 8. Just west of this cross wall a floor is preserved, at a depth of 3.12 meters below the surface of the ground, on which were found two coins of Germanicus, of the type which shows the Emperor in a triumphal chariot and was issued by Caligula in 37 to 41 A.D. (Brit. Mus. Cat. *Coins of the Roman Empire*, I, p. 160, no. 93). Above a lower floor level a little farther to the north a coin of Julius Caesar, similar to that listed in the British Museum Catalogue, *Coins of Corinth*, no. 485, indicates that this lower floor was the Greek level at the time of the re-settlement of the city. This view is confirmed

by the Greek lamps and the quantity of Greek and Corinthian potsherds found scattered everywhere about the lower levels. On the east side of the north extension of this trench an ancient well gave some evidence of stratification of deposits, and here near some Roman lamps of good workmanship was found a lamp of characteristic Corinthian buff-ware, decorated with red bands on a white slip. As a coin of Agrippina Jr., who died in 59 A.D., similar to no. 560 in the British Museum Catalogue, *Coins of Corinth*, was found near these lamps, an approximate date is furnished for their period.

Objects of greater artistic and archaeological interest were discovered farther north in this same trench. In the northeast corner, at a depth of five to five and a half meters below the surface, was a deposit of one hundred and sixty small round bowls, without handles, made of the buff-colored Corinthian clay and covered with a white slip. These bowls, which are approximately of the same size, with a diameter of 0.06 meters and a height of 0.025 meters, were apparently buried with care, as they lay side by side or in superimposed piles. They are undoubtedly dedications to a temple, or containers for offerings, that were buried at the time of some clearance of the sanctuary. As they have no decoration they do not furnish in themselves any evidence for date, but this is fortunately supplied, within certain limits, by a terra-cotta votive-plaque that was found at the same level near them. This piece, which measures 0.095 m. by 0.08 m., is part of a larger tablet, as only on the right side and the bottom are sections of the moulded frame preserved. It shows on the right side a nude figure with a horse's tail, holding a staff or club in the left hand, and having an animal's skin hanging across the left arm. This figure is starting to the right, with the left leg extended and bent at the knee. He is stretching his right arm to the left, and his head is turned in the same direction, as he looks at a nude man seated on the left. The scene may represent a satyr before Dionysus, or possibly Marsyas before Apollo. The satyr's body is beautifully modelled, with an accurate delineation of muscles and an admirable expression of momentary action. The skill and style of the arrangement of the group, and the craftsmanship exhibited in the execution of the figures, together with the treatment of the folds of the garments, mark this as a fine piece of work that may be dated in the beginning of the fourth century B.C. In this same vicinity many ivory pins were lying, and close by was found an archaic terra-cotta statuette of a youth, of a height of 0.055 meters. The boy is nude, with long hair and almond-shaped eyes. He sits on a base with his left leg bent under him and his left hand resting on the base. His right hand is laid on the right knee, which is drawn up. The figure, which is made of the local buff Corinthian clay, is modelled in the round, but is hollowed a little under the base. It is

evidently very similar to the archaic statuette from Camirus, listed in the British Museum Catalogue, *Terracottas*, p. 117, no. B265. This location also yielded another important and beautiful object, which is reproduced, in the size of the original, on Plate IV from a water-color made by Prentice Duell. This is an archaic conventionalized ivory lion, eight centimeters high, which, in erect posture, may have served as one of the supports of a bowl or of a small table. The ivory is in a state of perfect preservation, as far as its surface and texture are concerned, but the figure is slightly injured on one side at the top. The head is early in appearance, with hair and ears rendered in a conventional manner. The mouth is open and a small hole is perforated in the lower jaw for a supporting rod or chain. A light rectangular base, sloping on one side, is above the head, and under the paw the bottom is smooth. A narrow groove is cut in the back to receive the metal rod that supported the weight of the superimposed object. It is a charming piece of archaic carving that may be the only remaining part of a rich dedication.

While these excavations were in progress it became necessary to despatch several workmen to a spot about a mile west of the theatre, beside the Sicyon road, in order to clear and protect a bit of mosaic pavement there which was in danger of being washed away by a rivulet from a fountain close by. This led to the discovery of a sumptuous Roman villa, of which five rooms were uncovered, all paved with mosaic floors of beautiful and intricate patterns.

The villa stands in a pleasant location, with the rich plain sloping in front towards the Corinthian Gulf, while in the distance behind rises the citadel of Acro-Corinth. It was supplied with excellent water from an abundant spring which flows from a hill of red clay, whence the site is now locally known as Kokkinovrysi. At the east end of the house the atrium, a large room, 7.15 meters square, has a square impluvium in its centre, at each corner of which is a column base. The impluvium is a cement-lined pool, 0.32 meters deep, that was open to the sky, while a roof, supported by the four columns protected the rest of the room. Marks in the floor of the pool indicate that the cement had originally been covered with some kind of a veneering, possibly made of thin plaques of colored marble, such as are found elsewhere in the villa. On each side of the pool a picture, 1.15 m. by 0.95 m. in size, is represented in mosaic, and is surrounded by a mosaic frame consisting of a colored guilloche pattern within an elaborate meander design. The picture on the south side, which is perfectly preserved, shows a herdsman standing beneath an olive tree and playing a flute, while to the right are three oxen, two standing and one lying on the ground. A large yellow cook-pot is placed beside the tree, and green shrubs are scattered over the terrain. Both the figures and the objects are given reddish

brown shadows. There are remarkable attempts at foreshortening in the drawing of the figure of the youth and of the cattle, one of which is seen from the rear, like the pose of a horse on the Alexander mosaic from Pompeii. Landscape is suggested by an irregularly sloping hill in the right background, on which a bush is growing. As the youth wears a leopard's skin this may be a picture of Paris portrayed as a herdsman on the slopes of Mt. Ida. Figure 9 shows this picture reproduced from a water-color by Mrs. Shear. It illustrates in a

FIGURE 9. MOSAIC PICTURE FROM ATRIUM OF ROMAN VILLA. LENGTH 1.15 M.

remarkable way the stylistic characteristics attributed by Pliny (*Nat. Hist.* XXXV, 123 ff.) to the painter, Pausias of Sicyon. Pausias painted by preference small panel pictures of boys, and was famous for his use of foreshortening in the representation of cattle. Moreover, Pliny states that he introduced an innovation in art by painting his ox in a dark color, and that he emphasized the plasticity of his figures by the treatment of light and shade. These qualities are so noticeably present in our picture that it is safe to say that this mosaic is a close copy of a painting by Pausias, or by some member of his school at the neighboring town of Sicyon.

A great variety of colors and shades is secured in the mosaic by the selection of the stones. Besides the red and pink stones a lighter shade of pink is provided by the use of cubes of terra-cotta. The other colors are yellow, white, black, blue and green, all used in

constantly varying shades. The picture on the east side of the atrium represents a goat reclining under a large tree with spreading branches. In addition to the green used here for the leaves the tree has a top of deep brilliant blue, a color resembling *lapis lazuli* that is also found in another room of the villa. After microscopic examination of specimens from the mosaic, Professor Alexander Phillips, of the Department of Geology of Princeton University, reports that the pieces of blue and green are made of glass, and that the stones are limestones of different colors. The cubes used for the background of pictures and for the geometrical patterns are of an average size of one square centimeter, *opus tessellatum*, but smaller pieces of irregular shapes and sizes are used in the composition of figures and groups, *opus vermiculatum.* They are set in a brown-colored cement. The corners of the atrium are large squares, 2.17 meters, with alternating patterns, the southeast and northwest corners having a diamond design, while the designs in the other corners are circular. But though these geometrical patterns in opposite corners are similar the effect is different because the colors are variously distributed. The entire room is surrounded by a band of conventionalized beads and reels in red, outside of which is another band of small black pyramids, and finally a narrow strip of red runs along the base of the walls.

Opening from the southwest side of the atrium is a small room, 3.54 m. by 3.26 m., which has a mosaic gem on the floor. The centre of the design is an upright panel with a standing figure of Dionysus, who holds a thyrsis in his hand and has an ivy wreath in the hair. This panel is framed by the guilloche design that is used around all the pictures of the villa. The outside border about the room is a series of large, black crosses, with four narrow red bands across each bar, set on a white ground. Then comes the rectangle of decoration about the picture. On the north and south sides this is a diamond pattern, while on the east and west the design is circular, the corners being squares made up of smaller red and dark blue squares interspersed with white. The colors all shift in the repetition of the designs on opposite sides.

Northwest of the atrium a doorway leads down to the large triclinium or dining-room, 7.05 meters square, in the centre of which is a panel picture of Europa on the bull, 1.25 meters square, framed by a series of decorative bands. Outside the picture frame the entire floor is covered with a design of crescents having pointed projections in the centre. This is edged by a narrow blue band, outside of which is a broader white border, and finally along the walls a band of red. The simplicity of this pattern is undoubtedly due to the fact that the floor was in large part concealed by the dining couches that must have been placed about the room.

From the southwest corner of the triclinium a doorway leads to a small room, 4.43 meters by 3.41 meters in size, of which the mosaic floor is intact, and part of the frescoed wall is preserved to the height of about a meter on the south side. A view of this room from the southwest is shown in Figure 10. It is the finest room uncovered in the villa. The reproduction in black and white, given in Figure 11 from a water-color by Mrs. Shear, shows the interesting and beautiful designs, but conveys little idea of the striking color effect of the original. Bordered by decorative bands of intricate circular, crescent, and diamond motives is a panel, 2.10 meters square, in each corner of which a cantharus is represented with vines extending from it. The cups are colored alternately orange and grey to represent gold and silver vessels, which contain respectively red and white wine. A circular frame of guilloche design is inscribed in this square, within which are concentric circles of pyramids, skilfully colored so as to give the effect of an ornamental, flower-like setting to the centre of the design, which is a small circle, 0.33 m. in diameter, in which the head of Dionysus is portrayed, with ivy leaves and fruit in the hair, in careful and beautiful style. Figure 12 is a reproduction on a small scale of a water-color made in the size of the original by Mrs. Shear. The simplicity and dignity of the head, the skilful representation of the eyes, the shaded flesh colors of the cheeks, and the contrasted arrangement of the green leaves and the mellow fruit in the hair indicate that the mosaic craftsman was executing the conception of an artist, and place this among the best works of Greek mosaic. There is not place in this report for a stylistic and historical study of this magnificent villa, but it must be

Figure 10. View of Roman Villa from Southwest

pointed out that the head of Dionysus in style, appearance and technical execution bears much relationship to the Dionysus in the mosaic of the house of Dionysus at Delos, and that the circular border with the wave pattern, which also occurs about the picture of Europa in the triclinium, is identical in design with the double border that frames the picture at Delos (*B.C.H.* XXX, 1906, pp. 537 and 538, fig. 14, plate XI). A similar arrangement of concentric

FIGURE 11. MOSAIC FLOOR IN ROOM OF ROMAN VILLA

circles about a central picture of Medusa occurs on a mosaic floor that was found at Peiraeus (Ἀρχ. Ἐφ. 1894, plate 4), but the colors of the design in this work are distributed in such a way that the flower-like setting for the picture is lost. The walls of the rooms at Corinth are made of heavy stones set with mortar, and are finished with a painted stucco face. At the base of the walls a marble socle is built of various colored marbles, above which the wall is

painted in a mottled style, red and white or grey and white, apparently to continue the color note of the streaked marble. In the room of the Dionysus head, the walls encroach seriously on the mosaic designs and give an unusual shape to the room. The west wall of this room is cut by a doorway, of which the marble threshold is still in place, through which one passes into a large room to the west. The mosaic pattern of the floor is entirely geometrical, with designs arranged in complex squares. Like the other rooms in the

FIGURE 12. HEAD OF DIONYSUS FROM MOSAIC FLOOR OF ROMAN VILLA. DIAM. 0.51 M.

villa this floor was covered by a thick deposit of lime and time was not available last season for its complete clearance, which will be effected next year.

Numerous objects of minor importance were found in this villa. The extreme range in date for the coins is from the third century B.C. to the comparatively recent times of the Turkish occupation. There are vases of Roman date, and pot-sherds of many types, some belonging even to the Proto-Corinthian group. Among other finds may be mentioned many stone spindle whorls, ivory pins and clay lamps. Three of the lamps are of a characteristic Corinthian shape with a square nozzle, made of the soft, buff-colored Corinthian clay, which is covered by a white slip decorated with red bands. These are similar to the lamp found in the well of the

Athena trench in proximity to a coin of Agrippina Jr. (59 A.D.), and may be reasonably dated in the middle of the first century A.D. Many Roman remains indicate that the villa was occupied at this time, but it is significant that fragments of Greek lamps were also found, as well as two coins of the third century B.C., and some earlier pottery. The style of the mosaics resembles most closely similar work at Delos which is dated in the third century B.C. (*B.C.H.* XXX, 1906, p. 540), and, therefore, it seems to me probable that the mosaic floors of the villa were made before 146 B.C., and that subsequently they were used in the rebuilding of the house. This view would furnish a plausible explanation for the obtrusion of the walls on the mosaic design of the room with the Dionysus head, and incidentally would add probability to Galen's story (*Protrept.* 8, I, p. 19, Kühn ed.) of the visit of Diogenes, the Cynic, to a friend whose house was paved with valuable mosaics having pictures of the gods.

THEODORE LESLIE SHEAR

PRINCETON UNIVERSITY

Archaeological
Institute
of America

THE "DRAGON-HOUSES" OF SOUTHERN EUBOEA

THE small structures in southern Euboea, usually referred to by the name given them by the peasants, are humble things in comparison with the creations of Ictinus and Mnesicles; but they are in admirable preservation, and through the lack of close parallels present an archaeological problem of some interest. Although visited a number of times in the last century, they have recently been neglected: it seems that no photographs of the houses at Stoura have been pub-

FIGURE 1. HUT ON MT. OCHA

lished. The house on Mt. Ocha was well described and illustrated by Wiegand,[1] but in view of the importance of this house it will not be out of place to describe it again and to present additional illustrations.

This structure (Fig. 1) is only a few feet below the top of the mountain; the contrivance which marked the summit, and which is seen behind the "dragon-house" in Wiegand's Plate II, has now disappeared. The hut is oblong, 9.85 m. by 4.95 m. on the inside and 12.70 m. by 7.70 m. on the outside. For the plan see Wiegand, p. 12; I copy his dimensions, which I verified. The hut is built entirely of stone, without mortar or clamps. The roof (Fig. 2) is formed by large, flat stones arranged according to the principle of the corbel vault; each one advances farther than the one below it,

[1] *Ath. Mitt.*, XXI, 1896, 11–17. Older discussions: H. N. Ulrichs in *Annali dell'Instituto*, XIV, 1842, 5–11 (the same as: *Reisen in Griechenland*, II, 252–259); Hawkins in Walpole's *Travels in Various Countries of the East*, 285–293; Welcker, *Kleine Schriften*, III, 376–392 and 553; Baumeister, *Topographische Skizze der Insel Euboia*, 29 f; Bursian in *Arch. Zeit.*, XIII, 1855, 132–135, Girard, *Mémoire sur l'isle d'Eubée*, 74 ff. I have not seen the last-named discussion.

until only a narrow space in the center is left uncovered. Since this construction is employed at the ends as well as at the sides, there is a part at each end which is completely roofed by the large stones. The remaining aperture is 5.76 m. long and was 0.50 m. wide; its original width now remains at only one point, since only one of the uppermost slabs remains on the south side. Except on this south side there are four layers of the roof-slabs; on that side there were only two, but each slab was so cut as to correspond in appearance to the two slabs on the other sides. Above the door, however, the

FIGURE 2. HUT ON MT. OCHA—ROOF

lower slab was omitted, a mere beam serving as substitute on the outer face of the wall.[1] Thus there is a vacant space above the lintel of the door and below the middle of the great roof-slab, the edges of which rest on two slabs of the lower row. The lintel consists of two blocks on the same level. The inner edge of the inner lintel block is given a semi-cylindrical shape. This is the most clearly decorative bit in the whole building; it makes part of the crowning course of the wall, which runs around the whole of the interior. The height of the wall, including this crowning course, is 2.35 m. Wiegand found paving slabs on all four sides of the interior, apparently, and concluded from the treatment of the edges that the center also was paved. Since his visit, digging in the interior has been renewed, and I found only one slab visible and *in situ;* it was at the base of the north wall, between the center and the west end, and was *ca.* 2.00 m. long, 0.80 m. deep, and 0.10 m. high.

While the early visitors assumed that the present opening in the roof was original, Wiegand rightly judges that it was closed by a number of flat stones. In fact, he found in the vicinity some slabs

[1] See Wiegand, fig. on p. 13, and Hawkins, pl. opposite p. 289, at top.

which, he thought, had served for this purpose; they had circular openings in them, which would have served for the escape of smoke. I did not see these stones, but the suggestion is very reasonable. At all events the presence of windows is sufficient evidence that the roof was closed; and we shall find a few parallels which suggest the same conclusion.

The door and the two windows are in the south side. The door is 2.10 m. high and 1.20 m. wide, the width being the same throughout its height. It is formed by two large jambs and the lintel previously described. Bursian found on the jambs "Canale zur Einfügung

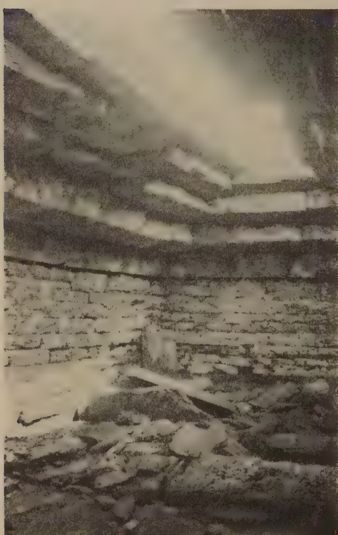

FIGURE 3. HUT ON MT. OCHA—INTERIOR

FIGURE 4. HUT ON MT. OCHA—SOUTHEAST CORNER

hölzerner Thürpfosten" but I was unable to discover marks of any sort of attachment. The door is sheltered by the projection over it of the roof-slab. As has been stated, this is the only one of the original uppermost course of slabs which remains on the south side, so it is uncertain whether the others projected in this way; but probably they did not, since there is no such projection on the other three sides.

The masonry of the "dragon-house" is good: the stones are carefully fitted together, and in at least one fallen stone the joining surface shows a distinct anathyrosis. Most of the stones are noticeably flat. In general they are arranged in fairly regular courses of varying height, but there is a good deal of irregularity in the horizontal joints, which gives a certain polygonal character to the masonry. Wiegand's figure on p. 13 shows the interior west wall, which is the

most polygonal part, while Figure 3 here shows parts of the east and north walls. The larger blocks of the exterior are somewhat more regular in their arrangement. In the interior the faces of the blocks are smooth, though not finely dressed. On the outside many of the blocks have a singular sort of rustication (Figs. 1 and 4): there is a narrow smoothed band along the bottom of the block, while the rest of the surface is only roughly shaped—in some cases very roughly indeed. This treatment is surprising in view of the careful fitting of the blocks and the sophistication in building shown throughout. Taken along with the use of long, flat blocks and with the slightly

FIGURE 5. SOUTH HUT NEAR STOURA

polygonal style of the interior, it gives a distinct individuality to the masonry of the hut.

A climb of about three quarters of an hour from the wretched Euboean village of Stoura brings one to three stone huts [1] which are known to the people, or to some of them, as "dragon-houses." Two of these, facing each other on the north and south sides of a rectangular space, look like clumsy imitations of the hut on Mt. Ocha. The third, on the east side of the quadrangle, is square in ground-plan. The west (downhill) side of the quadrangle is now closed by a rough wall which I take to be modern. All the huts show signs of recent use as sheep-shelters.

The two oblong houses (Figs. 5 and 6) are 9.70 m. long and 3.90 m. wide, on the outside. The blocks of which they are built are usually thin, as in the Ocha hut; this is doubtless due partly to the nature of

[1] Rhangabe in *Mémoires présentés à l'institut*, first series, III, 1853, pp. 220–222 and pl. V; Welcker in *Rhein. Mus.*, IX, 1854, pp. 611–617; this is a summary, with comments, of a description in Girard, *Mémoire sur l'isle d'Eubée,* which I have not seen; Bursian, in *Arch. Zeit.*, XIII, 1855, pp. 129–132; Baumeister, *Topographische Skizze der Insel Euboia*, pp. 26 f. He republishes Rhangabe's drawings.

the stone, which divides naturally into such forms. The courses are generally horizontal. Small stones are used for filling in many places. The blocks are only roughly shaped. The doors have no jambs. In the south house there is a noteworthy point of correspondence with the Ocha hut in that the large roof-slab which serves as a lintel (Fig. 5) projects over the door. There are no windows.

The roofs (Figs. 7, north hut, and 8, south hut) are precisely similar to each other and essentially similar to the roof of the hut on Mt. Ocha, though the slabs are much thinner at Stoura. It is to be assumed that the central aperture was closed by cover-slabs in these

Figure 6. North Hut near Stoura

cases also. A view of the interior (Fig. 9, north hut) shows clearly the complete structural analogy with the Ocha hut and also the great inferiority in execution. In both huts at Stoura the floor slopes and always did, as is evident from the paving slabs—large, flat, and irregular in shape—which remain. At the upper (east) end of each hut the native rock takes the place of paving.

The east building is 3.90 m. square at the bottom. The lower part of the wall is built up of stones of various sizes. The roof is formed by rather large slabs in five courses, of which each advances inward beyond the course below it as in the oblong huts. In this instance, however, the upper part of the hut is a circular dome. The transition is made simply by placing across each corner one slab of the lowest of the five courses. At the top is left a circular opening 0.60 m. in diameter. This could easily be, and presumably was, closed by a cover-slab. In the southeast corner there still remains a sort of shelf, a thin slab set into the corner. Baumeister saw remains of a similar slab in the northeast corner. There is no window, though Rhangabe's drawing shows something that might be taken for one.

On the exterior west wall of this hut, the masonry is somewhat better than in the other two, but the difference is not great.

Bursian, who ascribed the "dragon-houses" to the Dryopians, grouped with them certain other remains in Euboea. The traveller who journeys to "Archampolis"[1] is rewarded chiefly by the sight of a rugged and picturesque gorge. From the north side of the gorge there is a projection which ends on the west side in a sheer descent to the depths of the ravine. On the north side it is similarly precipitous, though here the drop is comparatively short; previous observers have thought that isolation on this side was secured by artificial

FIGURE 7. NORTH HUT NEAR STOURA—ROOF

means, though that did not occur to me when I saw it. On the south side the slope is gradual in part, making a sort of terrace; but the ascent to this place from below is very difficult, as may be gathered from the remarkable fervor with which it is described by Rhangabe and Baumeister. On the east side a relatively easy approach was constructed: a path, supported by rude walls, affords access to the projecting hill from the north slope of the ravine. On the south slope of this curiously inaccessible hill are some antique ruins.

The early travellers found remnants of a circuit wall on the south and east sides—of course none would be needed on the other two sides—and of some fifteen houses. My visit was hasty and I had not read the earlier descriptions; I can only say that if such remains are there now they must be in a very dilapidated state. But the best preserved structure on the hill is certainly that visible, from close at hand, in Figure 10. In shape it is oblong with an extension at the northwest end. The main (south) front is 12 metres long, the continuation to the west 4.60 metres; the depth at the east end is 7.50

[1] Rhangabe, *op. cit.*, pp. 227–231; Bursian, in *Arch. Zeit.*, XIII, 1855, pp. 136–139; Baumeister, *op. cit.*, pp. 31–33.

m., measured to the inside of the north wall. On the west side the total depth was somewhat greater: the depth of the main part is 4.75 m., of the projection 4.55 m. The greatest height is 3.00 m. The walls vary in thickness from 0.60 m. to 1.00 m. In the southeast corner there is a rectangular construction, a sort of platform; it is approximately on a level with the present top of the wall, which is the ground-level inside the room. This platform is about 2.80 m. by 3.00 m. There is no sign of an entrance anywhere in the walls. The character of the masonry appears clearly in the illustration: stones of very different sizes were used; they always approximate rectangu-

FIGURE 8. SOUTH HUT NEAR STOURA—ROOF

lar form and their long sides are always somewhere near horizontal. The blocks are not closely fitted. Interstices are filled by small stones, which are usually flat and are frequently made into piles of six or more when the space to be filled is tall and narrow. This practice is seen occasionally at Stoura, though to no such extent as at Archampolis; on Mt. Ocha it does not occur at all.

There are several other bits of similar walls to be seen in the ravine, and on a terrace, nearer the sea than is the isolated hill, there are the foundations of a building of considerable size. Its ground-plan is not easily made out. All these constructions are doubtless connected with the copper and iron mines of which traces are still visible; they may have served for store-houses and dwellings of workmen. The ravine ends in a pretty little cove with gently shelving beach. The ore was probably conveyed away by sea, and it was fear of attack that suggested the extraordinary isolation of the buildings on the hill.

Ruins very similar to those at Archampolis are said to exist on

Cape Philagra.[1] Rhangabe[2] was told of structures somewhat resembling those at Stoura near a village Aminon (or Aminou?), situated on the east coast opposite Stoura. I have not seen either of these sites. Bursian[3] would include parts of the wall at Dystos[4] as examples of the style of the "dragon-houses." There is a considerable variety of style in the walls there, but there is no part that particularly resembles the masonry of the stone huts. The same may be said of the ruins at Archampolis: the ruins there may very well be of the same age as the "dragon-houses," but there is nothing

FIGURE 9. NORTH HUT NEAR STOURA—INTERIOR

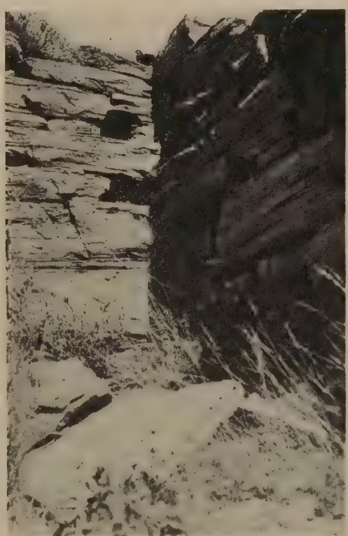

FIGURE 10. ARCHAMPOLIS

in the rude masonry that proves that they are. The group then is reduced to the four structures at Stoura and Mt. Ocha.

There may be some doubt of the propriety of ascribing even these four to one period: there is certainly a great difference in the quality of masonry. Furthermore it must be noted that a method of roofing very similar to that used in the stone huts is now employed in the neighborhood. Figure 11 shows the interior of the chapel of St. Elias, some fifty yards from the "dragon-house" on Mt. Ocha. I also observed two or three sheep-huts in southern Euboea which are roofed in the same way, while I have not seen nor heard of examples of this method of construction elsewhere in Greece. The exact age of these modern structures is not evident; the older travel-

[1] Baumeister, *op. cit.*, p. 33; Bursian, in *Arch. Zeit.*, XIII, 1855, pp. 135 f.
[2] *Op. cit.*, p. 223.
[3] P. 139.
[4] Described by Wiegand, in *Ath. Mitt.*, XXIV, 1899, pp. 458–467.

lers mention a chapel of St. Elias,[1] but say nothing about its construction. It seems clear, however, that the "dragon-houses," in spite of the loss of their cover-slabs, have received the honor of imitation in periods long subsequent to their own. But this imitation is not close enough to produce similarity in structure and form such as that which binds the "dragon-houses" together. This similarity justifies at least an assumption that the four ancient buildings belong approximately to the same time.

The early travellers assigned a remote antiquity to the "dragon-houses," finding them analogous to the galleries of Tiryns and Mycenaean beehive tombs; while Wiegand, noting the quasi-polygonal masonry of the Ocha hut and the occurrence of anathyrosis, said that it might be later than the sixth century but certainly was not earlier. This conclusion is accepted in the guidebooks of Baedeker and Fougères and I suppose generally. In the guidebooks similar or later dates seem to be assumed for the huts at Stoura. But nobody has cited valid analogies among other monuments; for this there is good excuse, but conclusions reached without such analogies must be largely conjectural.

The chief structural feature is the corbel vault. In regard to it two points may be noted: the courses, as they successively project toward the interior, are not dressed to a continuous surface nor otherwise disguised; and the corbelling does not continue until slabs from the two sides meet, but a space of some width is left to be covered by a central row of slabs. It is also to be noted that three of the buildings are oblong and that the fourth consists of a circular dome placed on a square chamber.

In Mycenaean architecture the corbel vault is much used in the beehive tombs, but the inner surface never shows the projection of successive courses in any such manner as we find at Stoura. In the galleries of Tiryns there is no use of cover-slabs; the top of the passage is closed by the meeting of the inclined walls. No masonry like that of the Ocha hut can be ascribed to Mycenaean builders, nor any structure bearing any sort of resemblance to the oblong "dragon-houses."

In buildings of the classical Greek period examples of the corbel arch, if not strictly of the corbel vault, are not hard to find. In the window of a house at Delos (Fig. 12)[2] for example, the width of the opening diminishes toward the top, but a considerable space is left to be covered by the lintel. In a portal at Assos[3] the space so left

[1] Baumeister, *op. cit.*, p. 29; Welcker, *op. cit.*, p. 553.

[2] The photograph was made by Mrs. B. H. Hill, who kindly permits me to publish it.

[3] *Papers of the Arch. Inst. of America*, I, pl. 27; Clarke, Bacon, Koldewey *Investigations at Assos*, p. 205, fig. 2; Perrot-Chipiez VII, pl. XI.

is proportionately larger and the portal has greater depth. In both these cases the converging walls are given a flat surface. At Phigalia a small gate—and there are said to be others like it—has two courses advancing from each side without any such disguise.[1] From available material it is not easy to estimate the age of these gates; but they, or at least the one illustrated, seem to belong to the older part of the fortifications of Phigalia. To judge from Blouet's illustration of the tower beside this gate and presumably contemporary with it, a date in the earlier part of the fifth century, or even in the sixth, would be reasonable.

FIGURE 11. CHAPEL ON MT. OCHA

FIGURE 12. WINDOW IN HOUSE AT DELOS

A tholos tomb is somewhat analogous to the domed hut at Stoura. There is a tomb of the fourth century or later near Kirk Kilisse in Thrace[2] in which the space at the top, covered by a flat slab, is relatively large, and the corbelling on the inside is emphasized in a curiously artificial way; the wall is a succession of horizontal concave surfaces, of which each includes parts of two courses.

Several tombs in south Russia show the use of corbel vaults in which the projection of successive courses is neither concealed nor in any way elaborated. The "Golden Tumulus"[3] is round like the Thracian tomb and Mycenaean tholoi. In the "Melek-Chesme" tumulus[4] both ground-plan and vault are square: the courses advance toward the interior on all four sides and the space left for the

[1] Blouet, *Expédition de Morée*, II, pl. 2, fig. 2 (Perrot-Chipiez VII, pl. XI).
[2] *B.S.A.*, XVII, 1910–1911, pp. 76–79 and pl. XX (Hasluck); cf. *B.S.A.*, XVIII, 1911–1912, p. 216.
[3] *Jh. Oest. Arch. I.*, X, 1907, pp. 237 f. (Durm); Minns, *Scythians and Greeks*, p. 195.
[4] *Jh. Oest. Arch. I.*, X, 1907, pp. 240 f. (Durm).

cover-slab is square. This of course is the method used in the three rectangular huts in Euboea. The structure of the tumulus at Kul-Oba[1] was very similar; and Rostovtzeff illustrates[2] an oblong chamber in another tumulus which is made in the same way. The "Royal Tumulus"[3] has a square ground-plan but a circular dome; the transition is effected by five courses which are corbelled out in the corners and fulfill the purpose of pendentives.

All these tombs, along with a number of others found in the same region and more or less similar, are ascribed by Rostovtzeff[4] to the fourth century. Since many products of Greek art were found in them, this dating rests on solid evidence. In all cases the masonry is excellent, comparable to that of Greek temples of the same period: I do not think that there are any buildings of this sort in south Russia in which the construction is so rude as in the "dragon-houses."

Certain remains in Caria must be considered also: they consist largely of tumuli.[5] One, of which a drawing is available,[6] is rectangular in ground-plan and almost square. The four walls all incline inward, the long ones more than the short ones; apparently the rectangular form is maintained throughout the height. The masonry is somewhat rough, and it is not clear whether the projection of the successive courses is disguised or not, nor indeed whether the arrangement of the stones is sufficiently regular to form courses. The contents of this tomb indicate a sub-Mycenaean date. A later and finer tomb[7] is apparently constructed in the same way, though the description and sketch are none too clear. The interior surface is dressed smooth. This tomb is assigned to the fifth century. Tombs of this type are common in Caria: the photograph of a well-preserved example at Orak-Buki[8] illustrates clearly the way in which the four walls advance in the upper courses, preserving the rectangular form of the chamber and leaving a comparatively large space (1.60 m. by 1.70 m.; the chamber at bottom is 3.80 m. by 3.50 m.) to be covered by two slabs. In this case the blocks are so roughly dressed that there is no question of disguising or leaving undisguised the projecting courses.

In some tumuli[9] the principal chamber is round. If these chambers were roofed at all, it was undoubtedly by a corbel vault, but

[1] Minns, *op. cit.*, pp. 195–202.
[2] *Iranians and Greeks in South Russia*, p. 75.
[3] *Jh. Oest. Arch. I*, X., 1907, pp. 233–241 (Durm); Minns, *op. cit.*, p. 194.
[4] *Op. cit.*, p. 77.
[5] Systematically discussed by Paton and Myres in *J.H.S.*, XVI, 1896, pp. 242–264.
[6] *J.H.S.*, VIII, 1887, pp. 66–68 and fig. 3 (Perrot-Chipiez V, fig. 215); *J.H.S.*, XVI, 1896, pp. 264 f.
[7] *J.H.S.*, VIII, 1887, pp. 79–81, figs. 27–29; also *J.H.S.*, XVI, 1896 pp. 246 f., figs. 19–21.
[8] *Ann. Scuol. It. At.*, IV–V, 1921–1922, p. 443.
[9] *J.H.S.*, XVI, 1896, pp. 248–251.

there is doubt whether there was any roof. I am not sure how many examples there are of a rectangular ground-plan surmounted by a circular dome, but one photograph[1] clearly shows this type of construction. The transition is effected simply by placing a large stone across the corner, as in the hut at Stoura.

The extraordinary ruins of Alizeitin[2] include a house[3] consisting of two rectangular chambers. Each is roofed by a corbel vault; only the long walls converge, however, the short ones being vertical. In one chamber there are six converging courses, while in the other the photograph does not make the number clearly evident. Each chamber has a door in the middle of the long side and the smaller one has another in the end. It is worth while also to refer to a corridor in the tomb at Orak-Buki which has been mentioned. The corridor is formed by rough converging courses; but instead of meeting at the top, as in the galleries of Tiryns, they leave a space about half the width of the corridor (perhaps more; I judge from the illustration) which is covered by flat slabs. This of course is the principle employed in the "dragon-houses."

Rostovtzeff[4] writes, "I have no doubt, although we possess no examples, that the corbelled vault was continuously employed in Thrace, and in Greece and in Asia Minor as well, from the Mycenaean period onwards, for underground buildings and especially for tumulary graves." But it is clear that the occasions for such use in Greece would be very rare; and in fact the "dragon-houses," with no better reason for survival than any other stone buildings—the corbel vault would not be used in wood construction—are not saved by the best analogies that can be cited from distinct isolation among the monuments of Hellas. One more domed structure will be mentioned presently, but the closer relatives of the "dragon-houses" are found in south Russia and Caria.

In the former region we have a few elaborate tombs built in good Hellenic style. Though the forms of the tombs may be indigenous, the architectural methods are not the result of any traceable native development, but of imported culture. Fourth century Greeks, acquainted with the principle of the corbel arch, developed it to meet the requirements of funerary customs in south Russia. But it is not established that they ever used it there for structures above the ground; and even the oblong chamber illustrated by Rostovtzeff, though built on the same principle as the "dragon-houses," differs considerably in appearance, *e. g.*, in the greater proportionate height of the courses.

[1] *Ann. Scuol. It. At.*, IV–V, 1921–1922, p. 429.
[2] *L.c.*, pp. 432–440; *J.H.S.*, XVI, 1896, 199 f., here Paton and Myres suggest that the ruins are not later than the time of Mausolus.
[3] Plan on p. 435; photographs of interior on pp. 436–437.
[4] *Op. cit.*, pp. 78 f.

In Caria the situation is very different. There the corbel vault was used in early times, probably as an inheritance from the Mycenaean civilization, and continued in use for centuries. Moreover, it is not only the structural principle that is common to the "dragon-houses" and Carian buildings: the masonry also is of the same general sort, with much use of flat stones, so that the relation between the Euboean huts and the chambers at Alizeitin strikes the eye at once. Other remains at Alizeitin,[1] show similar masonry; and the occurrence of windows, so rare in Greek houses, should be noted. If the report in the Annuario had contained illustrations of the "dragon-houses" they would have seemed to be in the context to which they belonged, instead of occupying a position apart as they do among Greek monuments. In fact it is justifiable to say that from the historical standpoint they are not Greek, but Carian.

One can imagine how the early travellers would have relished this fact and how eagerly the relations of Abantes, Dryopians, Leleges, and Carians would have been debated. But it is probable that few students will now disagree with Wiegand in his conservative conclusion that the Ocha hut, and hence presumably the others, is not earlier than the sixth century. We are led to inquire when, in historical times, the circumstances were such that monuments essentially Carian should be built in Euboea. In the third and second centuries this might well happen. The Rhodian state was then in its glory. In the treaty of 188 B.C. Rhodes secured political possession of much of Caria; we are not too clearly informed as to the extent of her *peraea* in earlier times nor as to the precise nature of her power on the mainland, but undoubtedly she was in a dominating position.[2] Rhodes was the chief trading city and maritime state of the Aegean; there were surely many Carians in her service; they and their culture and monuments built by them or under the influence of their methods might easily appear anywhere on the shores of that sea.

There is nothing in the masonry of the stone huts which tends at all to throw doubt on the date which has been suggested. The masonry of the huts at Stoura, indeed, is so rough that it could neither confirm nor disprove any date whatever; but the Ocha house has a distinct character in this respect. The best parallel for its masonry, so far as I know, is found in a tower in Tenos.[3] I know it only from Demoulin's illustration; but the long, flat blocks, carefully fitted but very roughly finished on the face, and the occasional use of smaller flat blocks, give an appearance very similar to that

[1] *Ann. Scuol. It. At.*, IV–V, 1921–1922, pp. 432–440.
[2] See Van Gelder, *Gesch. d. alten Rhodier*, pp. 107, 111 ff., 140 ff and *passim*.
[3] *B.C.H.*, XXVII, 1903, p. 258. Demoulin says it is 6.25 m. square.

of the hut on Mt. Ocha. There is a door at ground-level in the middle of the south side. "Une voûte, large de trois mètres, supportait l'étage supérieur," says Demoulin too briefly. The tower has one feature that does not appear in the Euboean structure: the corners are dressed. This dressing is very common in walls of the fourth century and later. It may have been introduced earlier, but it would hardly be used in such a structure as the tower in Tenos until it was quite usual. The tower then is not earlier than the fourth century and may belong to the Hellenistic period, and this indicates a similar date for the "dragon-house."

A domed structure much closer, geographically, to the Euboean huts than any hitherto mentioned is found in the circular tower of Agios Petros in Andros.[1] It is not necessary here to describe this very remarkable monument: it may suffice to say that there is at the bottom a round, corbel-vaulted chamber, with a hole in the top of which the original size is not now determinable, and that above this chamber there were several stories which were reached by a stair formed chiefly, as is clear in Sauciuc's illustration, of large, flat blocks. The interior surface of the vaulted chamber is dressed smooth. In view of the scarcity of corbel vaults in classical Greece it is natural to assume that this tower belongs to the same time and represents the same influences as its neighbors the "dragon-houses." This assumption is strengthened by a consideration of the masonry. The exterior surface consists of long, flattish blocks in courses that are prevailingly horizontal; but the courses vary in height, and are cut into by smaller blocks which are of the same shape as the large ones and, like them, have their long sides horizontal. On the inside of the tower the same general method is followed, but the blocks are smaller and more irregular: the resulting effect is very similar to that of the interior of the Euboean hut. It must be noted that the dressing of the blocks on the outside is quite unlike in the two buildings; nevertheless, the similarity in masonry is on the whole considerable. The use of large slabs for the stair in the tower would be natural to builders accustomed to use such slabs for roofing.

Sauciuc assigns this tower to the third century, largely because of its resemblance to another round tower in Tenos,[2] which bears a dedicatory inscription belonging, as the forms of the letters show, to the end of the third century or a little later. It is stated in the Corpus[3] that the block bearing this inscription is inserted in the

[1] Sauciuc, *Andros*, pp. 29–33, with photographs of the exterior, the door, and the interior apparently just above the vaulted chamber; Lebas, *Voyage Archéologique, Architecture, Isles de Grèce*, pl. II, drawings of exterior, plan, and section; Manatt, *Aegean Days*, pp. 86–89, with photograph of exterior different from Sauciuc's; older references in Sauciuc.

[2] *B.C.H.*, XXVII, 1903, p. 259 (Demoulin).

[3] *I.G.*, XII, 5, 2, 955.

mediaeval part of the wall, but Demoulin seems to describe it as belonging to the antique part. At any rate it is evident from the illustration that only a few antique blocks are used in the later construction and that they closely resemble the antique blocks which remained in place, and had almost certainly fallen from the upper part. The tower then surely belongs to the end of the third century. Oblique joints between blocks of the same course are more common here than in the tower of Agios Petros and blocks of irregular height are less usual; but there is enough resemblance in the masonry to justify a strong presumption that the two towers belong to about the same time. Though Demoulin does not mention it, one sees in his illustration one of those singular vertical grooves of which there are four on the Andros tower.[1]

The masonry of the "dragon-house," if found in a fortification wall, would doubtless be referred to the fourth century or later. The use of flat blocks seems to grow commoner in Greek walls as time goes on. The use of rustication is also a late feature. A marginal drafting on the faces of blocks occurs in early times, for example, in the masonry represented in the "Erechtheum" gable[2] found on the acropolis; but the practice of allowing the central part of the face to project strongly must be very rare before the fourth century. In Hellenistic walls it is very common. All considerations, then, tend to favor the date previously suggested on historical grounds.

A word may be added on the purpose of the buildings. The early travellers regarded them as temples; but as more and more Greek temples became known this view became less and less tenable. It regains some plausibility when the huts are seen to be of Carian descent; so far as I can discover, no one knows enough about Carian religious buildings to deny the possibility that the "dragon-houses" might belong to that class. The best analogies at Alizeitin, however, were chambers in a house, and it seems at present more probable that none of the stone huts had a religious purpose. We can not be expected to divine just what their purpose was; but it is plausibly suggested that the hut on Mt. Ocha served as home to the watchman for a signal-fire. The ruder structures at Stoura may have been shelters for workmen in the quarries near to them, or for sheep; they would have served this purpose 2100 years ago as well as now.

Franklin P. Johnson

University of Illinois
Urbana

[1] A study of a number of round towers has been published by Dragatsis (Πρακτικά 1920, 147–172). He distributes them over a long period, from Mycenaean to Roman times. He believes that some features of the Andros tower are later than its original establishment (p. 162), but does not assign a date to it.

[2] Wiegand, *Porosarchitektur*, pl. XIV.

EXCAVATIONS AT THE ARGIVE HERAEUM 1925

Thirty years have now passed since the completion of the excavations at the Argive Heraeum under the direction of Dr. Charles Waldstein (now Sir Charles Walston), the first major enterprise of the kind undertaken by the American School. In four vigorous campaigns from 1892 to 1895 the whole of the sacred precinct of Hera had been cleared to native rock: the foundations of two temples and many other large buildings had been revealed, and in addition an abundant mass of new archaeological material had enriched our knowledge of ancient art—especially sculpture, ceramics, and bronze work. Ranging from the Geometric Period to Roman times in their chronological sequence, these remains had made clear the great importance of the worship of Hera throughout Argive history and had shown that the roots of the cult could be traced back to remotest antiquity. Some remains of the prehistoric age, encountered within the precinct, chiefly foundation walls and pottery, had indeed permitted the Director of the excavations to conjecture that the site had been occupied by a settlement in Mycenaean times; and this conjecture was supported by the discovery on the sloping ridges to the northwest of two Mycenaean chamber tombs, one of which contained a rich store of late Mycenaean pottery. The further exploration of the prehistoric settlement was not, however, undertaken at the time, nor was the search continued for other tombs in the neighborhood. The discussion of the prehistoric material, therefore, occupied only a comparatively small place in the final publication of the excavations at the Heraeum.

In the years which have passed since 1895 the wonderful discoveries of Sir Arthur Evans at Cnossus and of his Greek, Italian, English, and American colleagues in Crete, of the British School at Phylakopi in Melos, of the Germans at Tiryns, the researches of Tsountas, Wace and Thompson in Thessaly, of Professor Soteriades in Phocis, and recently of the British School at Mycenae, to mention only a few, have added a vast amount of material and truly opened a new vista in prehistoric archaeology. In view of this the late Dr. Joseph Clark Hoppin, who was a member of the staff under Dr. Waldstein during the original excavations and who wrote the admirable chapter dealing with the pottery in "The Argive Heraeum," had long ago determined to reëxamine the prehistoric remains at the Heraeum in the light of the immense amount of new evidence available from other sites. His original intention was to carry out this undertaking in person; but when it became clear to him that this plan must unfortunately be given up, his eagerness to have the

work done was in no way diminished, and he asked the American School to conduct the excavation, providing a generous sum both for the actual digging and for the publication of the results. The offer was gratefully accepted by the Managing Committee of the School and the excavation authorized for the spring of 1925.

The campaign was planned and carried out in coöperation with the Director of the School, Dr. B. H. Hill, the work in the field being conducted by the writer of the present report. The excavations began March 9 and continued, with the usual interruption for the Easter holidays, until May 9. For the opening three weeks Miss Dorothy Burr, Fellow of the School, assisted in the superintendence of the digging; during the first fortnight of April Messrs. C. A. Robinson, Jr., and Oscar Broneer took charge of work in certain tombs; and Miss Dorothy Cox, who had joined the staff early in April and who made the measured plans and drawings of all the tombs, rendered assistance in overseeing during the concluding phase of the campaign. Mrs. Hill and Mrs. Blegen gave valuable help in the careful work of clearing three of the richest tombs. This account would not be complete without reference also to the services of our capable foreman, George Alexopoulos of Mycenae. To his tireless energy in exploring and his flair for ferreting out the tombs during the month he had at our disposal much of the success of the expedition is due.

The specific objects which Dr. Hoppin had in mind for this campaign were two: namely, first, "to explore thoroughly the ground just above the old temple and to the northwest, running down towards the ravine"; and, secondly, to make a vigorous search for further chamber tombs in the neighborhood of the two discovered by Dr. Waldstein and elsewhere about the site. "In a word my main idea has been to explore the vicinity of the Temenos and see what we can get in the light of our increased knowledge of the Minoan and Helladic Periods."[1]

In the campaign recently concluded an effort was made so far as possible to follow out these two objectives mentioned by Dr. Hoppin; and the results will be briefly presented in the following preliminary report:

The exploration of the ground above the old temple was carried out by means of six trial trenches, and traces of prehistoric occupation were everywhere found. The area in question (Fig. 1), rising steeply some few meters higher than the paved platform about the temple, forms the actual summit of the hill and is of no great size. The highest point is a bare outcropping mass of hard limestone, and elsewhere too the surface has been much denuded, the rock being

[1] The quotations are from a personal letter written by Dr. Hoppin in September, 1924.

covered now by only a thin layer of soil. Along the northwest side of the hill the rock ends in a sheer precipice (of no great height) bordering which is a sort of a ledge or terrace hardly more than 3.5 m. wide. It seems to have been much wider originally, but its outer edge has fallen away, undermined no doubt by the wearing away of the stratum of clay lying beneath, and, probably, by quarrying for the huge blocks used in the temple platform. This process of detrition has evidently caused serious destruction all along the north face of the "acropolis" and is well illustrated at the extreme north angle of the hill by a huge pinnacle of rock broken away from the main mass and separated from it by a broad crevasse. On the

FIGURE 1. "ACROPOLIS" ABOVE THE OLD TEMPLE AS SEEN FROM THE NORTHWEST

narrow terrace above the sheer face of the rock the earth is somewhat deeper than elsewhere in the vicinity and the two trenches dug here showed at once that the accumulation was formed by the ruins and débris of a prehistoric settlement. On and just below the surface of the ground quantities of pottery of the Late Helladic and the Middle Helladic Periods were found—this top layer being evidently in a disturbed condition. Immediately below this surface layer, however, a fairly thick undisturbed Early Helladic stratum was revealed, containing fragments of pottery in large numbers and the ruined walls of houses. These walls were built of small unworked stones laid in clay and served as the foundations for the upper part of the structures, made of crude bricks or wattle and daub. Unfortunately, no complete plan of a house could be recovered, as the surviving part of the ledge was too narrow to preserve an entire building. One rectangular room, however, and part of another were cleared, both possessing a hard clay floor, on which lay much broken pottery of characteristic Early Helladic types. These remnants are

sufficient to show that the houses of the period were of small size and were set very close together.

Farther toward the south, in the central part of the area under investigation, the soil was very thin, but here too the prehistoric layer proved in a number of places to lie still in an undisturbed condition. A large rectangular room of a house of the Late Helladic Period was uncovered (Fig. 2), though the rest of the building of which it once formed a part had been destroyed. The walls were thicker and more substantially built than those of the Early Helladic

Figure 2. Room of a Mycenaean House

Period mentioned in the preceding paragraph. In the room was found a large water jar of a typical late Mycenaean shape and much shattered pottery covered the floor of clay.

Farther down the slope, toward the southwest, in trench III some disconnected fragments of walls came to light and the usual abundance of potsherds. Among these latter were many fragments of Minyan and Matt-painted wares as well as Mycenaean.

It is therefore clear that the upper part of the hill, on which rose in Greek times the sanctuary of Hera, had at a far earlier date served as the site of a settlement; the history of which can now be traced, though the remains themselves are scanty, through the Early, Middle, and Late Helladic Periods—extending, that is, throughout the whole of the Bronze Age in Greece. The settlement was not, however, limited to this small area. Trenches dug on the lower slopes of the same hill, below the precinct, yielded evidence of similar occupation, although here the proportion of Early Helladic pottery was small, that of Middle Helladic and Late Helladic large. Many traces of prehistoric dwellings were also found in the deeper strata

examined within the precinct in the course of the excavations thirty years ago. There can accordingly be no doubt that the pre-Hellenic settlement on the site, covering the whole extensive hill, was a very large and flourishing one, worthy to maintain its place in the Argolid beside the strongholds of Mycenae and Tiryns and possessed of a citadel of no mean strength. That the vestiges of this town now surviving are so scanty is surely due in large measure to the fact that the site continued for centuries to be occupied by the famous shrine of Argive Hera, in which numerous large buildings were from time to time erected, with the consequent destruction of most of the earlier

FIGURE 3. THE YEROGALARO RIDGES FROM THE HILL ABOVE THE HERAEUM

constructions which had preceded them on the site. At the same time it hardly seems too bold a conjecture to hold that the cult of Hera is itself an heritage from this prehistoric settlement.

The two tombs discovered by the excavations of thirty years ago lay, one on the west side of the ridge which rises just beyond the deep ravine immediately to the northwest of the Heraeum, the other on the west slope of a broader ridge still farther to the northwest across a second smaller ravine. These two fairly broad ridges, which really form one tongue of land, descending from the mass of Mt. Euboea and divided into two parts by the gully mentioned above, are today known by the name Yerogalaro, which appears to apply equally to both. For convenience they will be referred to here as the East and West Yerogalaro ridges (Fig. 3).

A great many trial trenches were dug on both of these ridges during the spring of 1925, all the most likely-looking places being tested for tombs. They resulted in the discovery of one new tomb on the West Yerogalaro ridge, in close proximity to that excavated by Dr. Waldstein, and twelve on the East Yerogalaro ridge. In addition to these Mycenaean chamber tombs, seven Middle Helladic graves

came to light on the East Yerogalaro ridge, and one "chamber tomb" probably of the Early Helladic Period; while the most unexpected result was the discovery at several points on the same ridge of remains of the Neolithic Period.

Further trial trenches were laid out on the upper reaches of the ridge which bears the Heraeum itself, yielding some scanty additions to the neolithic material, some Mycenaean pottery, and two good geometric bronzes, but no tombs. And finally an extensive system of trial trenches on the slopes below the Heraeum toward the south brought to light pottery of the Early Helladic Period, pottery and two graves of the Middle Helladic Period, quantities of Mycenaean potsherds, a considerable mass of material of the Geometric Period, chiefly bronze work and pottery, and a small building, perhaps a foundry (?), probably of Roman date.

These discoveries will be briefly discussed below in their chronological order.

On the broad surface of the East Yerogalaro ridge a roughly circular area was encountered, clearly marked by the intensely black earth filling it. Apparently there was here originally a slight hollow in the soft native rock, perhaps artificially made, which in some way became filled with a deposit, *ca.* 0.80 m. deep, of carbonized matter, ashes, and black earth. It contained also numerous potsherds, some animal bones, part of a large bull's horn, and many small stones. From this small area, approximately 4.00 m. in diameter, four baskets of pottery were collected. It is almost all a rather thick, heavy, handmade ware, not especially well-baked, but usually with a polished surface. Much of it is plain, without decoration; some is ornamented with a belt of simple, incised or scratched patterns along the rim; but the characteristic type is decorated with curious or fantastic designs in red outlined in black—a fabric very closely related to the well-known "three-color ware" of the second Neolithic Period in Thessaly. The material is so shattered that it may not be possible to restore many whole vases, but it is clear that the shapes represented are for the most part those of open vessels decorated both inside and out. This pottery is exactly like that found in the excavation of the prehistoric site at Gonia near Examilia in the Corinthia.

The purpose of the circular depression filled with this débris of the Neolithic Period is not absolutely certain; but the conjecture which suggests itself at once is that we have here the floor of a primitive round hut, the walls of which, constructed of wattle and daub, have totally perished. If so this is the first neolithic dwelling—as the pottery is also the first of this period—yet brought to light in Argolis.

Not far from this "hut-emplacement" four other similar hollows were laid bare, each containing black earth, débris, and pottery of

the same type. These were all much smaller, however, ranging from 0.80 to 1.25 m. in diameter. In one case a ring of small unworked stones surrounded the hollow. Too small to form the floor of even the most primitive hut, these depressions yielded no satisfactory explanation. In all these cases the neolithic deposit was pure and quite undisturbed; there was no admixture of potsherds of later types.

Elsewhere on the ridge (especially in the neighborhood of chamber tomb 9) neolithic pottery was found mixed with Early Helladic sherds. Perhaps a grave had been dug here in Early Helladic times through a neolithic deposit. On the long slope north of the Heraeum hill some further fragments of the neolithic incised pottery came to light, though traces of houses were not revealed in the ensuing search.

The discovery of these early remains may be regarded as one of the most important results of the supplementary excavations at the Heraeum during the past season. For it is now certain that the Argolid too must be included within the sphere of neolithic civilization—a sphere which with the progress of research in the Peloponnesus is steadily seen to be growing larger. It is curious that such remains have never been found at Mycenae or at Tiryns or at Argos itself. At all events it can hardly be purely fortuitous that the hill about which human habitations clustered already in neolithic times should have been known from the beginning of the historical period as the site of the venerable sanctuary of the Pan-Argive Hera.

One tomb which is almost certainly of the Early Helladic Period was found on the East Yerogalaro ridge. It appears to have been a small chamber hewn in native rock—perhaps a natural cavern rounded out or enlarged. No dromos was discovered, nor was the entrance clearly marked. The whole east side of the chamber had collapsed and the interior had been disturbed by the mass of rock and earth which had fallen into it. In this filling, in which two or three well-marked layers could be distinguished, neolithic and Early Helladic potsherds were found mingled together, but in scanty quantities. An explanation of this has been suggested above. Three skulls, badly crushed in the collapse of the chamber, and in extremely fragile condition, appeared, and there were a few other fragments of human bones, including part of a thigh. None of these lay in order. The three skulls were fairly widely separated: two lay against the side wall of the chamber and the third under a large stone not far from the side. The tomb thus appears to resemble the Early Helladic ossuaries found in 1922 at Zygouries. The small finds were very meagre, comprising only a few bits of obsidian and three spherical stone beads, the latter not pierced through the center, but with a string-hole in a slightly raised

projection from the surface, resembling a lug. No whole vases came to light in the tomb.

On the same East Yerogalaro ridge seven Middle Helladic graves were uncovered. Most of these were immediately below the surface of the ground, and denudation of the soil on this sloping hillside probably accounts for their disturbed condition. One just outside the entrance to the dromos of chamber tomb No. 15 (Late Helladic), and a similar grave on the slope directly south of the Heraeum, however, proved to be intact, and from these the original disposition of these Mddle Helladic graves can be recognized. The grave itself was a simple shaft cut in soft rock or hard pan, just large enough to receive the body, which was laid in it either at full length or more usually in a contracted position (Fig. 4). Very few offerings were deposited in the cist along with the body; they were present in only two graves of the nine here discussed. In one cist were found a fine bronze dagger with portions of its ivory handle, and a pair of bronze tweezers; in the other a single vase—a small jug. Five of the graves contained only a few decayed remnants of bones, and in two instances even the bones themselves had totally vanished.

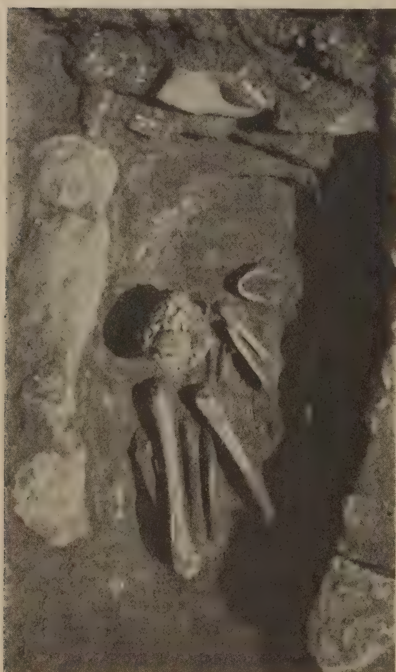

FIGURE 4. BONES IN CIST—MIDDLE HELLADIC GRAVE

Over the cist was laid a cover composed of several irregular flat slabs of limestone. In seven cases nothing was found above these cover slabs and had not the two graves mentioned above come to light, this might have been thought to constitute the complete Middle Helladic grave. But deep soil had fortunately accumulated over the two graves in question and here it was found that sepulchral offerings had been deposited above the stone slabs covering the cist. In grave No. 1 there were four vases, shattered but practically complete: two cups of Yellow Minyan and two jugs of Matt-painted ware. The grave just beside the end of the dromos of tomb 15 yielded a Matt-painted jug with a high slender neck, two yellow Minyan cups and fragments of a third. These are very interesting and important examples of Middle Helladic interments for which no

exact parallel appears to have been previously published. If the conclusion is correct that in Middle Helladic burials the sepulchral offerings were often placed above the cover of the grave, it is easy to understand why the objects found within the cists themselves are generally so scanty.

The thirteen Late Helladic tombs, which yielded the most valuable finds of the campaign of 1925, are all chamber tombs of the Mycenaean type familiar from so many other sites—that is, each consists of an entrance passage, a doorway, and a grave chamber, all hewn out of native rock or hard pan. They were found scattered over a fairly wide area, but the distribution does not appear to be entirely accidental; an arrangement more or less in groups may be recognized. The westernmost group—group I—on the West Yerogalaro ridge, consisted of two tombs, one being that discovered by Dr. Waldstein, the other our No. 1. On the east side of the East Yerogalaro ridge lay four tombs side by side (Nos. 2, 3, 4, 13)—group II. Five tombs fairly close together (Nos. 5, 6, 7, 14, 15) on the west side of the same ridge, not far from the second tomb discovered by Dr. Waldstein, constitute group III. Some 100 m. distant toward the northeast, another pair of two, facing south (Nos. 10, 11) form group IV; while No. 12 was found alone much higher up on the ridge, to the north. It may well be that there are still other chamber tombs in the vicinity of the Heraeum, but in view of the many trial trenches dug, it seems unlikely that further discoveries will materially change the topographical grouping set forth above. New tombs will probably be found in new groups.

The exact significance of this system of grouping, which is paralleled by the arrangement of the tombs at Mycenae and elsewhere, is not easy to determine. To a considerable extent it is no doubt conditioned by the nature of the rock which had to be cut. The geological character of the hills about the Heraeum presents a varied alternation of hard and soft formations, with frequent outcrops of compact limestone or conglomerate separated by masses of soft puddingstone or clay. The hard stone was naturally avoided, and the tombs are always found in the softer formations which were easy to cut. But something more is necessary to explain satisfactorily the arrangement in groups. These latter may perhaps occupy plots belonging to related families or to small clans. It does not seem probable, at any rate, that they indicate any clear chronological differentiation, although it happens that three of the four tombs of group II are distinctly early (L. H. II).

Of our thirteen tombs four have a chamber approximately circular in plan; in four the chamber is roughly rectangular; and in five the shape is irregular. The tombs with circular chamber are all early (L. H. I and II) but they are hardly sufficient to allow the

general conclusion to be drawn that all circular tombs are early. Tomb 14, which contained objects of the first Late Helladic Period, is rectangular.

Again in the shape of the dromos there are some differences. In eight cases the dromos is very wide and, though its sides taper inward, has a broad opening at the top. Most of these dromoi are also comparatively short, but in two cases they attain impressive length (almost 18.00 m. in tomb 2, Fig. 5). Three tombs have a long dromos, wide at the bottom, but with sharply tapering sides

Figure 5. Dromos of Chamber Tomb 2

Figure 6. Dromos and Door of Chamber Tomb 10

which result in a very narrow opening at the top (Fig. 6). And finally in two cases the dromos is short and tapering and slopes very steeply downward to the doorway. Here again the evidence seems still insufficient to establish safe criteria for determining the relative chronology of the tombs. In the last named group, for example, tomb 1 is early (L. H. I) and tomb 12 late (L. H. III). If any general conclusion may be drawn, it may be that short, broad, open dromoi are likely to be early, and long, tapering, closed dromoi are relatively late.

In size too the tombs show no little variation, ranging from small examples which measure hardly more than 2.30 m. across, to the imposing dimensions of No. 7, measuring *ca.* 5.60 m. from side to side, or No. 2 with a diameter still greater.

Finally we have the chronological order to consider, and the dating here attempted is based exclusively on the objects found in the

tombs. The earliest group of objects, from tombs 1 and 14, belong to Late Helladic I, and the construction of these tombs may accordingly be attributed to this date. On the same kind of evidence tombs 2, 3, 13, and possibly 15 were built at least as early as Late Helladic II, while the remaining tombs, 4, 5, 6, 7, 10, 11, 12, may fall in Late Helladic III.

These chamber tombs were of course not intended for the interment of one person alone, but were essentially family vaults, and in every case no doubt continued to be used for some time. The evidence for this was very clear in many instances, such as tomb 13, for example, where no less than five successive groups of remains could be readily distinguished, ranging from L. H. II to the latter part of L. H. III in date. The number of persons buried in each tomb varied from three or four to more than twelve. Each successive occupant was deposited in orderly fashion somewhere near the center of the chamber (Fig. 7), the bones and belongings of his predecessor being removed to one side or assembled in a small cist dug for that purpose.

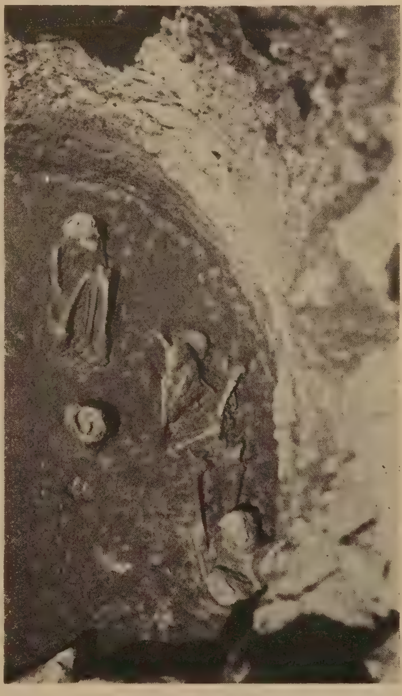

FIGURE 7. TWO COMPLETE SKELETONS IN CHAMBER TOMB 3—FROM ABOVE

In this sense all of the tombs had been disturbed; in each case the original occupant or occupants had been displaced by successors, and without a doubt many valuable objects which had been deposited in the tombs were on the occasion of later interments removed, perhaps by the relatives or descendants of the original possessor. It is almost certainly this form of robbery (if it may be called robbery) which has stripped the majority of Mycenaean tombs of their most precious relics. At the Heraeum, at least, there was in no case clear evidence of plundering from the outside in post-Mycenaean times. The wall closing the doorway of tomb 7 was found partly demolished, with an opening in its upper part large enough for a man to enter. But resting on the filling of large stones in the dromos before this opening was a grave, containing a well-preserved skeleton, almost certainly dating from Mycenaean times. The hole in

the doorway therefore seems to be due to carelessness on the part of those who conducted the final burial in the tomb, and not to the attack of later plunderers.

One curious phenomenon, which was observed in no less than five tombs, remains to be mentioned. A layer of ashes, burned bones, charred wood, and black carbonized matter covered the whole floor of the chamber of tomb 7. The pottery, which was utterly shattered, also showed the effects of intense heat. All the contents of this tomb had clearly been destroyed by fire. A similar black layer covered the floor of tomb 14 and here, too, charred wood and bones, pottery with flaked surface, ashes, and carbonized matter gave unmistakable evidence of fire. In tomb 10, likewise, were found large fragments of charred wood, and many half burned bones came to light, though the layer of ashes and black carbonized matter was not so thick as in the two foregoing instances. In tomb 2 no less than three thin layers of black were observed, containing charred matter and burned bones—the layers separated from one another by thin striations of yellow clay. And, finally, in tomb 3, one large heap of bones, pottery, and débris to the left of the center of the chamber—and this was the earliest group of remains in the tomb—gave similar evidence of burning. Thus, though no trace whatsoever of the same condition was found in the remaining eight chambers, it cannot be doubted that fire was occasionally used for some purpose in Mycenaean tombs. The explanation of this curious phenomenon was not very clear. In tomb 7 the fire had certainly been extremely hot and had almost totally consumed the contents of the chamber. In the other cases the flames had surely been of less extent and kept under control. In all these chambers bones untouched by fire were also found—in cists sunk into the floor or in some protected places in the tomb. It does not appear that we are dealing with the practice of cremation, but rather with the employment of fire for fumigation from time to time when a tomb was reopened to be used again.

Tomb 2, distinguished from the others by its decorated façade (Fig. 5), is the largest and most pretentious of those found, and also yielded the richest harvest. The inner end of its broad dromos was coated with fine stucco on which the door jambs and lintel were marked with painted designs. The pattern consists of a vertical row of large connected spirals on each side between the doorway and the side of the dromos, and a similar horizontal row across the face of the lintel. The spirals are fairly well drawn (though not with mechanical accuracy) with large eyes at their centers. The colors employed—blue-black, yellow, red, and blue—were very well preserved. The plaster had been applied directly to the soft rock in which the tomb was cut and, though it had suffered considerable damage and its surface was badly cracked, nevertheless held together

surprisingly well. The lintel had unfortunately almost totally collapsed. The whole of the painted decoration was removed as carefully as possible by Mr. Panayotakis of the Archaeological Service, and it is hoped that it may in time be set up and restored in the National Museum in Athens. Tombs of this type with decorated façade seem to be rare, though two were discovered by Tsountas at Mycenae.

As the present is merely a brief preliminary report, a detailed list of the finds from each tomb would be out of place, and only the more important objects will be mentioned here.

Pottery was found in great abundance; the total yield of vases

FIGURE 8. GROUP OF BONES AND VASES IN CHAMBER TOMB 13

from the thirteen tombs is not far short of 200, the number ranging from four in tomb 6 to thirty-eight in tomb 2. Among these pots are good specimens of the First Late Helladic style, many splendid examples of the naturalistic style of Late Helladic II, including a magnificent amphora with a design of realistic octopuses, and a fine series of Late Helladic III pots illustrating the progressive stages of the late Mycenaean period (Fig. 8).

Objects of bronze came to light in considerable numbers. The most interesting group, from tomb 10, was the equipment of a warrior, comprising three spearheads, a knife, a cleaver, a pair of tweezers, an arrowhead, and a large basin which covered the deposit,—almost all in excellent condition. Plain bronze knives and daggers were discovered also in other tombs and from tomb 3 came a long sword, unfortunately broken.

The most noteworthy and valuable objects of the whole campaign were two bronze daggers decorated with gold and silver inlay on niello. One, from tomb 3, bears on each side of the blade a row of three flying birds—perhaps doves—done in silver, but with eyes of yellow gold, and wearing golden collars. Toward the hilt end of the

dagger the background appears in gold, but until the oxidization is removed the exact representation cannot be determined. The three gold-covered rivets by which the handle was attached are still preserved, though no trace of the handle itself was found. The second dagger, from a cist in the floor of tomb 14, is a well-preserved piece of metal, though no little time and care will be required to clear away the heavy incrustation which now covers much of its surface. On each side of the blade is represented a single spirited dolphin in delicate inlay of gold and niello, giving a very elegant effect. This dagger also still preserves its three rivets at the hilt, but the gold-plated heads are missing. These two daggers are well worthy to take their place beside the famous weapons from the royal shaft graves at Mycenae, and form a noteworthy addition to the extant examples of the work of the best Mycenaean armourers and goldsmiths. They must no doubt be assigned to the latter part of Late Helladic I or the beginning of Late Helladic II, somewhat later than the specimens from the shaft graves.

The chief objects of gold recovered during the campaign of 1925 came from tombs 2 and 3. If such objects had originally been deposited in the other tombs as well, they must have been subsequently removed, on the occasion of the reopening of the tombs for later interments.

Two gold necklaces were found in tomb 2. One consisted, apparently, of twenty-seven beads, eleven larger in the form of a pendant lily and sixteen smaller with a shield-like shape. The beads were found scattered over an area of perhaps one square meter and the order in which they were originally strung is not certain. An arrangement leaving three of the smaller shield-shaped beads at each end of the string and providing an alternation of lilies and shields in the middle gives a good effect. The second necklace consists of twenty-nine small beads, spherical in shape, suggesting pomegranates. These beads, like those of the foregoing necklace, are hollow shells of gold. They are pierced for stringing, and a collar with granulated edge around the string hole is the only decoration.

From tomb 3 came an extraordinarily delicate gold chain and a pair of gold ornaments in the form of a shield, also no less than eight gold-plated rivet heads, apparently from a sword or a dagger which seems not itself to have survived.

Objects of ivory came to light in several of the tombs. They include ornaments in the shape of sea shells (from tomb 2), rosettes (tomb 14), buttons, a sword pommel, and a comb; and some delicate fragments of ivory inlay. The ivory was usually in extremely decayed or fragile condition and could be removed safely only with the greatest care.

From the earlier tombs several gems of hard stone (carnelian) were obtained, cylinders or flattened cylinders in shape, two or three with interesting new designs. The later tombs produced a few ordinary late Mycenaean lentoid gems of steatite.

Many beads of hard stone were found, including some handsome oval specimens of carnelian. The most curious is a very large pendant of carnelian, cut to represent an elephant—a subject which seems to be unique in Mycenaean glyptic art. Unfortunately the figure is not quite complete, the lower part of the head and trunk having been broken away. Along the back of the elephant are three

Figure 9. Foundations of Bridge (?) of Geometric Date

tiny but deep holes in a row, in one of which was found a pin or filling of gold.

Quantities of beads of glass paste of the usual Mycenaean forms were found in the tombs and not a few of amber, the latter generally in wretched condition. But this brief survey of the finds may be concluded with the mention of a well-preserved Egyptian scarab of glass paste which came to light in tomb 14. The inscription it bears indicates that it is of amuletic character and dates from the early part of the New Kingdom—a chronological cross reference of great value for the dating of the tomb.

To complete this preliminary report of the supplementary excavations at the Heraeum in 1925 it is necessary to mention a few objects of Hellenic date which were discovered in the course of the search for tombs.

One grave of the Geometric Period was found (No. 8) between two of the Mycenaean chamber tombs (7 and 14). It contained a small dish of bronze, fragments of another, some bronze pins and two small vases, but no trace of bones appeared. The grave was a small cist built of unshaped stones.

On the southeast bank of the "Eleutherion" ravine, at the

bottom of the slope to the northwest of the Old Temple, a massive stone foundation was investigated, perhaps the substructure on which an ancient bridge was carried across the gully (Fig. 9). The foundation proved to date from the Geometric Period. Close beside it at a depth of 1.30 m. a small deposit of bronzes was brought to light. It included a splendid griffin's head, 0.13 m. high, well preserved and with a fine patina, which had probably once served as a handle of a large bronze vessel; also a small figure of a bull, 0.104 m. long, equally well preserved and with good patina, the body fairly well modelled and covered with incised decoration in the geometric style. This figure too had probably originally been attached to a vessel of large size.

On the sloping ground below the Heraeum toward the south many trenches were dug, which everywhere yielded quantities of geometric bronzes. These were for the most part wires and long pins or spits, some of astonishing length, or disks of thin bronze of various sizes, some plain, others bearing decorations of rosettes or other figures. A rectangular pit cut in rock to a depth of 3.40 m. was discovered and cleared; the débris filling it contained a very large quantity of these bronzes, also a small human figurine, a curious ornament or attachment of bronze, representing a row of birds—perhaps ducks—seated on a cross bar, a dagger of iron, small ornaments of ivory and bone, and some very choice geometric and proto-Corinthian pottery. All these objects from the south slope are no doubt discarded votive offerings from the Temple of Hera.

Among other incidental finds should be mentioned a few small fragments of marble sculpture, probably shattered bits from the metopes of the later-temple of Hera (fifth century B.C.).

From the foregoing account it will be seen that the supplementary excavations at the Argive Heraeum resulted in a most gratifying success. This success must be regarded as the real achievement of the scholar who, though stricken himself, persisted in his determination to have the campaign carried out in the hope of elucidating some of the problems which had remained unsolved in the field where he had distinguished himself in his youth; and whose enthusiasm and encouragement and generous financial support alone made the undertaking possible. One cannot but regret that untimely death took him away before he had an opportunity to hear of the successful issue of his labor of love and to realize the import of his new contributions to archaeological knowledge. In conclusion it may be hoped that the final publication of the results of his last excavation may speedily appear in a worthy form as a tribute to the memory of Joseph Clark Hoppin.

Carl W. Blegen

Athens, Greece

Archaeological
Institute
of America

THE LATIN INSCRIPTION FROM ANTIOCH

In the American Journal of Archaeology[1] for 1924 Professor David M. Robinson gave notice of the discovery of an unusually important Latin inscription, an edict limiting the price of grain, at Pisidian Antioch, and in the current number of the *Transactions of the American Philological Association*[2] he has published the inscription at some length and with three splendid photographic facsimiles. With the edict proper I am not here concerned, but with the *cursus honorum* of a governor which accompanies the edict.

The document as a whole is in three columns. In the first appears in comparatively large letters the senatorial cursus of a certain Rusticus; in the second in much smaller letters, the edict is given in full; in the third at the top appears simply, RUFO. PROC. AUG., then a large blank space, and, near to the bottom of the stone, TIBERIA . PLATEA, denoting the place in the city where the stone was set up.

The cursus begins: *Gal. Rustico. cos. leg. Imp. Caes.* [*Domitiani.*] *Aug.* [*Germanici.*] *pro. pr. provinciarum. Capp. Galat. Ponti.*, etc. The edict begins: *L. Antistius. Rusticus. leg. Imp. Caesaris. Domitiani. Aug. Germ. pro. pr.*, etc. Robinson terms the Rusticus of the cursus Galerius Rusticus, and differentiates him from L. Antistius Rusticus of the edict.[3] In his earlier paper he speaks of Galerius Rusticus as a consular legate, and of L. Antistius Rusticus as a praetorian legate.[4] But obviously *Gal. Rustico*, "the writing of whose name," Robinson says, "in this shortened way shows the influence of the Greek over the Roman practice," should be read, interpreting the very common Roman form of abbreviation for the tribe, *Gal* (*eria*) (*tribu*) *Rustico*, and we have in the two columns one man only, *L. Antistius Gal. Rusticus*. On another stone above the line which now heads the cursus inscription may have been cut, L. ANTISTIO. L. (?) F. Such a line would about equal the other lines in length.

The identification is supported, if support is needed, by the fact that the cursus of *Gal. Rusticus* is on the same stone with the edict of *L. Antistius Rusticus*, and is in much larger letters. The stone was obviously set up not to publish the edict, but to honor the man who made the edict. The cursus in fact ends with the reason for putting it up, *quod* [*ind*]*ustrie prospexit annon*(*ae*). Clearly the price regulation of the edict had been successful, and in consequence a

[1] *A.J.A.*, XXVIII (1924), pp. 435–444.
[2] *T.A.P.A.*, 55 (1924), pp. 5–20, and plates I–III, following p. 248.
[3] *T.A.P.A.*, p. 16.
[4] *A.J.A.*, p. 441.

grateful people honor the governor in this tablet. Just before this final clause Rusticus is termed *patronus coloniae*, an honor which may very possibly also be associated with the favorable effect of his edict.

Another error in reading the stone occurs in lines 7 and 8 of the published text of the cursus. Robinson reads: *proco(n)s(uli)* . *provinc(iarum)* . *Hisp(aniae)* . *et* . *Baetic(ae)*—"the provinces of Hispania and Baetica," a strange phrase. The ET before *Baeticae* should be read LT and should be preceded by V for which there are plain traces and adequate space on the stone. In fact, unless line 8 is curiously indented, there is need of another letter at the beginning. ET then is properly VLT, and we read: *proco(n)s(uli)* . *provinc(iae)* . *Hisp(aniae)* . *Ult(erioris)* . *Baetic(ae)*. Baetica is properly so termed.[1]

Robinson concludes, apparently because Rusticus' offices appear in the descending order with the consulship first, that "he held the highest office of consul after he had been *legatus pro praetore* of the provinces mentioned." But of course the consulship regularly appears immediately after the personal name no matter what the order of offices, and its appearance here is simply a proof, and a good proof, that Rusticus was a consular legate of Cappadocia, Galatia, etc. To this point I shall return.

The expression *adlecto . inter . praetorios* Robinson translates by "appointed to the Praetorian Guard," and refers to it in his commentary as "the *adlectio* to the Praetorian Guard." But the phrase has nothing to do with the Praetorian Guard. It states simply that Rusticus had been appointed to all the rights and privileges of an ex-praetor, "chosen among those of praetorian rank." He had been given "by the deified Vespasian and the deified Titus" a splendid boost up the ladder of office, for he evidently skipped the quaestorship and the tribunate of the plebs, as nothing is said of these offices on the stone.

A study of Rusticus' cursus presents additional points of interest. The date of his consulship is not known; but we can get a fairly definite date, from which to calculate, in his command of the Eighth Augustan Legion, which he held under "the deified Vespasian and deified Titus and Emperor Caesar Domitian Augustus Germanicus." This office plainly belongs at least to the years 79–81 A.D. Before this period Rusticus had been *curator* of the Aurelian and Cornelian Roads, had been chosen among those of praetorian rank, had been given various military gifts of honor by Titus and Vespasian, evidently while serving as *tribunus militum* in the Second Augustan Legion. This legion was stationed in Britain. Probably Rusticus' service there was completed before Agricola went out as

[1] See Dessau, *Inscriptiones Latinae Selectae*, nos. 103 and 1016.

governor, but he may well have served under the famous Iulius Frontinus who subdued the Silures in the South of Wales.[1]

After his command of the Eighth Augustan Legion, circa 79–81, Rusticus was proconsul of Baetica, then prefect of the treasury of Saturn, then doubtless consul, then governor of Cappadocia, Galatia and adjuncts, the position he held when the inscription was cut. Three years would be a modest minimum for the offices held in the period between his command of the legion and his governorship. He could hardly have begun his term in Cappadocia before the year 85 at the earliest. So far the inscription alone will take us.

Robinson has properly applied Martial IV, 75 and IX, 30, published perhaps in 88 and 94 A.D. respectively, to the dating of the edict. The first poem refers to the marriage of Nigrina, and the second, to the death of her husband Antistius Rusticus "in the cruel regions of the Cappadocians." Evidently Rusticus died while governor of Cappadocia. The date of his death might then be in 93 or 94. The beginning of his governorship could not reasonably be put more than five years before at most, and would follow his marriage, which took place in Italy about 88. So much from Martial. A tomb-stone inscription cited by Robinson (p. 10) gives the name of Rusticus' wife as Mummia Nigrina.[2] Adequate evidence is not at hand to associate Rusticus with the well-known Antistius Vetus family, although the consuls of the years 28 and 55 from the family both had the praenomen Lucius.[3]

Additional evidence for dating the term of Rusticus should be submitted from what may be learned of the terms of other governors of Cappadocia about this time. T. Pomponius Bassus is established as governor as early as 95/96 A.D.[4] Known to have been consul suffectus[5] at Rome in September, 93, he probably succeeded Rusticus in 94. Certainly he can not have succeeded to the office before the last half of 93, after his own consulship. Tiberius Iulius Candidus Marius Celsus has been with probability assigned as governor of Cappadocia to the year 90, with possibly a year or two in addition.[6] Rusticus' term may therefore with reasonable certainty be limited to the years 92–94.

Rusticus' cursus adds one other definite item of information to our knowledge of the government of a group of territories which are listed in full in his, and in other cursus inscriptions. He was a consular, not a praetorian, governor of Cappadocia, Galatia, Pontus, Pisidia, Paphlagonia, Armenia Minor, Lycaonia. Pomponius

[1] Tacitus, *Agricola*, 17.
[2] *C.I.L.*, VI, 27881.
[3] W. Liebenam, *Fasti Consulares*, pp. 11 and 13.
[4] *Prosopographia Imperii Romani*, s.v. *T. Pomponius Bassus;* Dessau, 5840.
[5] Liebenam, p. 17.
[6] Pauly-Wissowa, s.v. *Ti. Iulius Candidus; C.I.L.*, III, 250.

Bassus was also a consular, and Iulius Candidus. Therefore at least in the last part of the reign of Domitian the province was consular.

It should be consular if two legions were stationed in it, as was apparently the case.[1] But legates of praetorian rank in this province are definitely known, and, as they are not termed legionary commanders, a natural supposition is that they were governors. For instance, C. Antius Aulus Iulius Quadratus is known from several inscriptions (in Greek) as *legatus Augusti provinciae*, when he was ex-praetor.[2] But he is never termed *pro praetore*, and the omission is significant. He was almost certainly a legate under the governor. From his cursus he may well have served under Iulius Candidus, or less probably under Rusticus. Earlier M. Hirrius Fronto Neratius Pansa is established as governor in the year 79 before the death of Vespasian, and he very probably governed under Titus[3] also. In the same province Ti. Iulius Celsus Polemaeanus as ex-praetor was legate of the deified Vespasian and of the deified Titus, that is at the same time as Hirrius Fronto. Polemaeanus too is not termed *pro praetore*, though this may be of no significance in his case because the expression is lacking even in connection with his command of a legion.[4] However, he was only an ex-praetor, and surely must have served as subordinate to Hirrius Fronto. As praetorian legates would scarcely be subordinated to others of the same rank, the appointment of consular governors, on this evidence, for Cappadocia and Galatia goes back at least to the end of Vespasian's reign. Of the consulship of A. Caesennius Gallus, governor circa 80–82, nothing is known.[5] But we may with some degree of assurance conclude that C. Pompeius Collega, known as governor in 76, was a consular, for as early as 69/70, probably as commander of a legion, he was temporarily in charge of Syria, and therefore may well have held the consulship between these dates.[6] It appears then that Cappadocia with Galatia and the other sections was under consular governors throughout the period of the Flavian dynasty.

In column III of the stone *Rufo. Proc. Aug.* is cut in large letters. Doubtless this Rufus was Imperial procurator at the time of the publishing of the edict, and may have been concerned with the enforcing of it. Curiously the lettering is comparatively poor, and no cursus follows, though there is space to match the space filled by the cursus of Rusticus. Robinson suggests that a stone placed on

[1] Domaszewski, *Rangordnung*, pp. 178–179; *Rh. M.* 48 (1893), p. 244 ff.
[2] Dessau, 8819; Pauly-Wissowa, s.v. *Antius*.
[3] Cagnat. *I.G.R.*, III, 125, and 223; *P.I.R.*, s.v. *Hirrius*.
[4] Dessau, 8971; *L'Année Épigraphique* 1904, 99; 1905, 120.
[5] *C.I.L.*, III, 318, 12218, and 14184 (48a); Dessau, 263 and 268.
[6] Dessau, 8904 and 998. Incidentally Collega, like Rusticus, was *patronus* of Antioch in Pisidia. Tac. *Hist.* II, 81; Suet. *Vesp.* 8.

top of the existing tablet "bore the honors and the *nomen* of Rufus."[1] Very likely a stone above gave the other elements of Rufus' name along with the missing parts of Rusticus' name, but I doubt that Rufus' cursus would there appear.[2] The blank space on the existing stone was for that. The appearance of only the common cognomen, Rufus, makes identification difficult. Robinson says: "We cannot tell whether he is the same as the Rufus who was proconsul of Asia under Domitian".[3] Such an advance from the Equestrian to the Senatorial career would be most unusual. And that Rufus could have gone in the four or five years that remained of Domitian's reign from Cappadocian procuratorship to the governorship of Asia, one of the plums of office at the summit of an ex-consul's career, is simply out of the question.

G. A. Harrer

University of North Carolina
Chapel Hill, N. C.
July, 1925.

[1] *T.A.P.A.*, p. 5.

[2] We may soon know, as Robinson at the end of his paper announces, that Sir William Ramsay may have discovered the missing first lines.

[3] *T.A.P.A.*, p. 20.

Archaeological
Institute
of America

THE ATHENIAN QUOTA LIST *I.G.* I², 216

THE quota list which is now given in the *editio minor* of the Corpus as *I.G.* I², 216 appeared in the earlier edition as *I.G.* I, 257, and the prescript of Col. I, lines 42–43, was restored by Kirchhoff to read:

[Πό]λε[ς ἃς] οἱ
[ἰδι]ō[ται ἒ]τ[α]χ[σαν].

Koehler had suggested before him the restoration:

[Πό]λε[ς ἃς] οἱ [ἰδιôται]
[φόρ]ο[ν ἒ]τ[α]χ[σαν φέρεν].[1]

Neither one of these restorations, however, conforms with the spacing of the letters still preserved on the stone, and Wilhelm, commenting on this fact, proposed a restoration, on the analogy of *I.G.* I², 218, Col. III, lines 45–46, by which the prescript in question should read:

[ταῖσδε πό]λε[σιν h]οι
[τάκται φόρ]ο[ν ἒ]τ[α]χ[σαν].[2]

Wilhelm's restoration conforms perfectly with the στοιχηδόν arrangement of the letters as preserved on the stone. The left margin of the prescript, as determined by ταῖσδε and τάκται, is also in perfect alignment with the left margin of the prescript immediately below (lines 50–51):

hαίδε τôν πόλεον αὐτὲ[ν]
τὲν ἀπα[ρ]χὲν ἀπέγαγον.

But in spite of these indications that Wilhelm's reading is correct, a comparison of this inscription with *I.G.* I², 211, 212, and 213 will show that the purport of the restorations as proposed by Kirchhoff and Koehler should not be changed. In place of readings which were perfectly correct in sense but epigraphically impossible there has been substituted a reading which is epigraphically feasible but, in itself, improbable.

The suggestion of Wilhelm's reading was due partly to the belief once commonly held that *I.G.* I², 216 and *I.G.* I², 218 were from two successive years of the same assessment period (427/6 and 426/5), and that of these two inscriptions *I.G.* I², 218 belonged to the earlier

[1] Koehler, Urkunden und Untersuchungen zur Geschichte des delisch-attischen Bundes, *Abh. Berl. Akad.*, 1869, p. 61.

[2] Wilhelm, Urkunden des Attischen Reiches, *Anzeiger der Wiener Akademie*, 1909, pp. 44–45. Wilhelm's restoration has been adopted in the new edition of the Corpus, *I.G.* I², 216.

year.[1] Analogy then required that the prescripts of 427/6 (*I.G.* I², 218) should be repeated in 426/5 (*I.G.* I², 216).

The purpose of this paper is to show, first, that there is no parallel between the appendices of *I.G.* I², 216 and 218; secondly, that the names of the appendix to which the prescript of *I.G.* I², 216, lines 42–43, belongs demand a heading in the sense of that proposed by Koehler and Kirchhoff; and lastly, that there is no reason for giving the dates 427/6 and 426/5 to these two inscriptions, or for believing that *I.G.* I², 218 is the earlier.

The differences between the appendices of *I.G.* I², 216 and 218 are to be found in the wording of the prescripts as well as in the lists of cities themselves. Wilhelm's suggested restoration for *I.G.* I², 216 differs from its prototype in the important detail that the name of the eponymous secretary of the board of assessors does not appear in *I.G.* I², 216. Also, on the analogy of *I.G.* I², 218, we should expect to find Amorgus in the appendix which lists the cities assessed by the *τάκται*. Instead, it appears elsewhere in the inscription (line 40). And finally, none of the cities of the appendix in question (*I.G.* I², 216) is found in the complete appendix of *I.G.* I², 218 from which Wilhelm took his heading. A comparative analysis of the appendices of these two quota lists shows that we are not justified in assuming a group of cities in *I.G.* I², 216 assessed by *τάκται*, merely because an entirely different group of cities was listed in *I.G.* I², 218 as assessed in a similar way.

The proposal of this paper is that the word *ἰδιῶται* be substituted in place of the suggested *τάκται* of Wilhelm and that the prescript of *I.G.* I², 216, lines 42–43, be restored to read:

[*ταῖσδε πό*]*λε*[*σιν h*]*οι*
[*ἰδιῶται φόρ*]*ο*]*ν ἔ*]*τ*[*α*]*χ*[*σαν*].

We now have a prescript after the sense of those proposed by Koehler and Kirchhoff, one which satisfies the arrangement of the letters preserved on the stone, and one whose left margin is in alignment with the left margin of the prescript immediately below. It is true that we have substituted a word of seven letters (*ἰδιῶται*) in place of the word of six letters (*τάκται*) restored by Wilhelm, but three of these seven letters are *iotas*, and the crowding is imperceptible. Moreover, it is necessary only to glance at the prescripts of *I.G.* I², 211, 212, and 213 to see that the *στοιχηδόν* arrangement of the letters need not be strictly preserved.[2]

This appendix appears first in *I.G.* I², 211, as follows:

[1] Cavaignac, *L'Historie Financière d'Athènes au Ve Siècle*, p. xxxvi. The new Corpus, *editio minor*, Vol. I, dates *I.G.* I², 216 and 218 in 427/6 and 426/5 respectively, but in both cases with some uncertainty.

[2] For the crowding of *iota* in *I.G.* I², 218 see Woodward, The Quota-List of the Year 427/6 B.C., *B.S.A.*, Vol. XV, p. 230.

	Πόλες, hὰς h[οι]
	ἰδιõται ἐνέ[γ]ρα-
	φσαν φόρον
	φέρεν
Δ	Πίλορος
Γ├├├ΙΙ	Κλεοναί
ΔΔΓ	Σίνος
Δ├├├ΙΙ	Διακρε̃ς
	ἀπὸ Χαλκιδέο[ν]
Γ├├├ΙΙ	Πίστασος
ΔΔΔ	Σύμε
	Τινδαι̃οι
	Κίθας
𐅄	Σμίλλα
	Γίγονος
	Hαι̃σα
𐅄	Βύσβικος
Γ├├├ΙΙ	Ὄθορος

In *I.G.* I², 212 the inscription is broken away so that only about half of the appendix has been preserved, but of the four names found in our appendix (*I.G.* I², 216) three are either preserved on the stone or restored with certainty.[1] In *I.G.* I², 213 the appendix is still more fragmentary, but the editors have restored with reasonable certainty two of the four names found in *I.G.* I², 216.

Δ├├[├ΙΙ	Διακρε̃ς]
ΔΔ[Δ	Σύμε]

The stone is broken away beyond this point.

There is only one objection to be raised against our restoration of the prescript in *I.G.* I², 216. The appendix in *I.G.* I², 211 contains thirteen names; our appendix contains only four. The explanation of this discrepancy, however, is a simple one, to be sought in the events of the years 432/25 within which *I.G.* I², 216 must be dated. During this period the Chalcidic and Bottic regions were in revolt from Athens, and the names of cities found in *I.G.* I², 211, known to have been in the area of the revolt, would have been out of place in a quota list from the period of the Archidamian war.[2] Pilorus, on the northwest shore of the Singitic gulf between

[1] In line 95 there are numerals ΔΔΔ├├├Ι[Ι] which do not correspond with any found in *I.G.* I², 211. Consequently, it is impossible to say what name should be restored there. Dahms, *De Atheniensium sociorum tributis quaestiones septem,* diss., Ber., 1904, p. 46, has restored in line 93 Γ├├├ΙΙ[Πίστασος], because of the general similarity of the appendices in *I.G.* I², 211 and 212.

[2] If the names of presumptive rebels do appear, we must suppose that they were in territory recaptured by Athens, as in the case of Π[λευμε̃ς] and Α[ἰ]ο[λι̃τα]ι from another appendix in *I.G.* I², 216. For Athenian conquests early in the war see Meritt, A Restoration in *I.G.* I, 37, *A.J.A.* XXIX (1925), pp. 26–28.

Assera and Singus, was Chalcidic.[1] Pistasos and Othoros were presumably Bottic.[2] Tinde, Kithas, Smilla, Gigonos, and Haisa were in Crossaea or on the neighboring coast, and hence in the disaffected area.[3] Finally, Sinos has been identified with Sindos at the head of the Thermaic gulf, in the sphere of influence of Perdiccas, who had encouraged the original revolt.[4]

If we subtract the names of these rebellious cities from the complete category of *πόλες ἃς οἱ ἰδιõται ἐνέγραφσαν φόρον φέρεν* in *I.G.* I², 211 we establish as a normal list for the period of the Archidamian War the following group of four names:

Κλεοναί
Διακρε̂ς
ἀπὸ Χαλκιδέον
Σύμε
Βύσβικος

Our restoration in *I.G.* I², 216 is confirmed by the fact that exactly these four names make up the list over which we have restored the heading *ταῖσδε πόλεσιν οἱ ἰδιõται φόρον ἔταχσαν.*

Having established a parallel between *I.G.* I², 216 and the earlier quota lists containing appendices, we now turn to the problem presented by the lines immediately preceding the prescript that we have restored. That these lines formed another appendix was recognized by Dahms.[5] The appearance of Ἀμό[ργ]ι[οι] in line 40 is proof that the items in question do not belong to the regular Thracian panel which occupies the upper portion of the column, and since Amorgos is found in the special categories of *I.G.* I², 211, 212, and 213 under the heading Πόλες *αὐταὶ (φόρον) ταχσάμεναι*, Dahms restored the prescript of the appendix in the lacuna above line 37 (*I.G.* I², 216) to conform.

[1] Herodotus, VII, 122.

[2] West, The Chalcidic League, *Bull. of Univ. of Wis., History Series*, 1912, published 1918, p. 85, note 9, identifies Pistasos with the Istasos of *I.G.* I², 64 and locates it in Bottice. It is known to have been a town of Thrace (Steph. Byz., *s.v.* Βίβαστος). While nothing is known of the location of Othoros, because its fairly consistent record of payments was broken at the time of the revolt, West, *op. cit.*, p. 133 places it in Bottic territory.

[3] Herodotus, VII, 123 is evidence for the location of Smilla, just south of Aenea, Haisa (MMS Λισαί), and Gigonos in Crossaea. Gigonos was the site of the Athenian encampment before the battle of Potidaea (Thuc. I, 61, 5). Kithas should be identified with the Σκίθαι of Steph. Byz. (πόλις Θρᾴκης πλησίον Ποτιδαίας). For Tinde see Steph. Byz., *s.v.* Τίνδιον, ἔστι καὶ Τίνδη Θρᾴκης Χαλκιδικὴ πόλις. Being bracketed with the other Crossean towns in *I.G.* I², 211, it was undoubtedly located near them.

[4] See Boeckh, *Staatshaushaltung der Athener*, 3rd ed., Vol. II, p. 728; Herodotus, VII, 123; Steph. Byz., *s.v.* Σίνθος.

[5] Dahms, *De Atheniensium sociorum tributis quaestiones septem*, diss. Ber., 1904, p. 55. Dahms' restoration Π[λευμη̂ς] has been adopted in the Corpus. In line 38 should be restored either [Κάσι]ο[ι], [Μιλκ]ό[ριοι], or [Χεδρ]ό[λιοι], with the probability in favor of [Κάσι]ο[ι], since this city was not in the area of the revolt as were Chedrolos and Milkoros.

In *I.G.* I², 218, however, Amorgos, with two other towns that had regularly appeared in the earlier lists as *πόλες αὐταὶ (φόρον) ταχσάμεναι*, is found under the heading *ταῖσδε ἔταχσαν οἱ τάκται ἐπὶ* Κριτίο? *γραμματεύοντος*. Consequently, if our inscription contains a list of cities assessed by the *τάκται*, as was supposed by Wilhelm, analogy requires that we should restore Wilhelm's suggested prescript above, not below, the name Ἀμό[ργ]ι[οι], so that this name might be included as a city assessed by the *τάκται* in *I.G.* I², 216 as it was in the list which scholars then dated in the preceding year, *I.G.* I², 218.

But there is a closer correspondence in the general arrangement of the list between *I.G.* I², 216 and *I.G.* I², 211, 212, and 213 than there is between *I.G.* I², 216 and *I.G.* I², 218. In the earlier inscriptions, as in our list, the Thracian panel was followed by two appendices, the second of which contained the names of cities assessed by *ἰδιῶται*. The arrangement of *I.G.* I², 218 was quite different, and there is no reason for preferring the formula of *I.G.* I², 218 to that of the earlier lists suggested by Dahms, especially as we have seen that the second of the two appendices kept the older classifications.

The restorations given in this paper for the special categories in *I.G.* I², 216 involve also the question of the dates of *I.G.* I², 216 and 218.

It was once assumed that only the two years 427/6 and 426/5 were open for the two inscriptions in question. The last quota list of the supposed *lapis tertius* of Kirchhoff was dated in 428/7, and the reassessment of tribute subsequent to *I.G.* I², 216 and 218 occurred in 425/4. It was merely a question, then, of the relative order in which the two inscriptions should be assigned to the two years available. There has been a tendency among scholars to suppose that Thera was brought into the empire only after the expedition of Nicias in 426, and since Thera is mentioned in *I.G.* I², 216 this inscription has been generally placed in the latter year.[1]

Since Fimmen's proof that the *lapis secundus* and the *lapis tertius* of Kirchhoff were in fact parts of the same stone,[2] *I.G.* I², 213 has been correctly dated in 432/1[3], rather than in 428/7, and *I.G.* I², 216 and 218 can no longer be definitely dated in 427/6 and 426/5. The years 431/0, 430/29, 429/8, and 428/7 are also open.

[1] *Cf.* Koehler, Urkunden und Untersuchungen, *Abh. Berl. Akad.*, 1869, p. 146; *idem*, Attische Inschriften des fünften Jahrhunderts, *Hermes*, XXXI, p. 147; Cavaignac, *op. cit.*, p. xxxvi; Woodward, *op. cit.*, p. 240 and note 3; Beloch, *Griechische Geschichte*, II², 1, p. 353 and II², 2, p. 361. On the other hand Dahms, *op. cit.*, pp. 48–49 (before the publication of Cavaignac's book) gives reasons for believing *I.G.* I², 216 earlier than *I.G.* I², 218. His view has been adopted in the *editio minor* of the Corpus, Vol. I, although with some reserve.

[2] Fimmen, Die Attischen Tributquotenlisten, *Ath. Mitt.* XXXVIII (1913), pp. 231–238.

[3] As in the *editio minor* of the Corpus, Vol. I.

Furthermore, it is remarkable that the generally accepted theory about the conquest of Thera has gone unquestioned so long. The passage in Thucydides (III, 91, 1–3) which describes the expedition in question does indeed tell of an attempt to bring Melos into the empire, but it makes no mention at all of Thera, and it is an entirely gratuitous assumption that the expedition of Nicias was concerned with Thera in any way. If the account of Thucydides proves anything about Thera, it proves that Nicias made no attempt, successful or unsuccessful, against the island. But this is, of course, an argument *ex silentio*. Boeckh long ago realized that Thera had become tributary to Athens at some time prior to the expedition of Nicias.[1]

The appearance of Thera in *I.G.* I^2, 216, certainly, cannot be used as evidence for the dating of that inscription in 426/5. There need, then, be no hesitation in following the indications of similarity between *I.G.* I^2, 216 and *I.G.* I^2, 211, 212, and 213 and in assigning to *I.G.* I^2, 216 a date earlier than that of *I.G.* I^2, 218.[2]

Allen B. West
Benjamin D. Meritt

Wheaton College
Princeton University

[1] Boeckh, *Staatshaushaltung der Athener*, 3rd ed. (Fränkel), Vol. II, p. 444.

[2] The mention of Methone in *I.G.* I^2, 216 as paying only the tithe to the goddess shows that the inscription comes from some year after the Methone decree (*I.G.* I^2, 57 = Ditt. *Syll.* I^3, 75) by which that privilege was granted, but as the date of the Methone decree is itself a matter of dispute, this problem must be left for discussion in a later paper.

METHONE AND THE ASSESSMENT OF 430

When the first Methone decree was dated in 428,[1] it was generally thought that 429 was the date of the assessment mentioned twice in the decree as having taken place at the last Panathenaic festival. But recent studies have given new dates to the quota lists on which this hypothesis was based,[2] and since no new attempt has been made to establish the date of the assessment or that of the Methone decree, the two questions will be considered in this paper jointly.

I shall try to show that the dates ordinarily given are for *a priori* reasons improbable and historically unsuitable, and that we must date the assessment in 430 and the decree during the following year. The evidence on which I shall base these conclusions is taken mainly from the decree itself, the narrative of Thucydides, and the quota lists, particularly *I.G.* I², 216.[3]

To enumerate, the decree states (a) that there had been an assessment at the last Panathenaic festival,[4] (b) that Methone owed tribute for one or more previous years,[5] (c) that the decree precedes the normal time for paying tribute,[6] (d) that Perdiccas had been encroaching upon the territory of Methone and had been interfering with Methone in other ways,[7] (e) that he was then on good terms with Athens,[8] and (f) that there were Athenian soldiers in Potidaea.[9] From *I.G.* I², 216 and 218, we know that the Methone decree precedes the loss of Aioleion and Pleume, two Bottic towns, tributary in *I. G.* I², 216.[10] From Thucydides we get this chronology:

432	Summer	Phormio captured several small towns	I, 65
431	"	Alliance with Perdiccas	II, 29

[1] *I.G.* I², 57; Dittenberger, *Syll.*³, 75; Hicks and Hill, 60; *cf.* Wilhelm, *Göt. Gel. Anz.*, 1903, 775. I shall use Kirchner's version in Dittenberger.

[2] In particular, Fimmen, *Ath. Mitt.*, 1913, pp. 231 ff., and articles by Meritt and West, *A.J.A.*, 1925, pp. 247–273, 292–298, 434–439. Assessments took place in 438–7, 434–3, and 425–4, but the evidence for the intervening period has not been examined.

[3] For the benefit of readers who wish to consult the first edition of the *Corpus*, I give here the numbers of the inscriptions cited in this paper according to both editions:

I.G. I, 38:	*I.G.* I², 65	*I.G.* I, 255:	*I.G.* I², 208
" 241:	" 209	" 256:	" 213
" 242:	" 210	" 257:	" 216
" 243:	" 211	" 259:	" 218
" 244:	" 212		

[4] Ditt., *loc. cit.*, lines 6 ff., 30 ff.

[5] *Ibid.*, lines 9 ff.

[6] Methone and Perdiccas were to send embassies to Athens for the Dionysiac festival, line 25. See p. 441, *infra*.

[7] Lines 16 ff.

[8] This may be inferred from the general tone of the decree, but particularly from lines 28 ff.

[9] Lines 27 ff.; *cf.* Wilhelm, *loc. cit.*

[10] They are not found in *I.G.* I², 218. *Cf.* West and Meritt, *A.J.A.* 1925, pp. 434–439.

430	Summer	Chalcidian campaign of Hagno	II, 58
430–429	Winter	Surrender of Potidaea	II, 70
429	Summer	Blow to Athenian prestige in battle before Spartolos	II, 79
429	"	Secret anti-Athenian intrigues of Perdiccas	II, 80
429	Autumn	Open break between Athens and Perdiccas, and expedition of Sitalces	II, 95

After the expedition of Sitalces, the next datable notice concerning Perdiccas is the second Methone decree, about July 426, from which we infer that Perdiccas had again come to terms with Athens. This is confirmed by a statement of Thucydides[1] that Athens broke with Perdiccas at the time of Brasidas' expedition northward in 424.

Thus the limits for the first Methone decree are the alliance with Perdiccas in 431 and the second Methone decree in the first prytany of 426–5.

Working backward, if we date the decree in the spring or summer of 426 after the payment of tribute of that year, *I.G.* I², 216 must date in the spring of 425. This is impossible, for it has been shown that *I.G.* I², 218 is later than 216, both being earlier than the assessment of 425.[2] The latest possible year for *I.G.* I², 216 is 427–6.

If we date the decree before the Dionysia in 427–6, we can place *I.G.* I², 216 in the spring of 426, but now we shall have to assume that the assessment took place at the Panathenaic festival of 427. This is extremely unlikely, for *I.G.* I², 216 and *I.G.* I², 218 are from different assessment periods.[3] In other words, there would have been three assessments in three successive years, 427–6, 426–5, and 425–4.

If we date the decree in the year 428–7 after the payment of tribute for that year, or in the first prytany of 427–6 before the Panathenaia, the assessment dates in the summer of 428, and *I.G.* I², 216 is the quota list of the spring of 426. The most effective argument against such a date is the decree itself which orders embassies to report at the coming Dionysia on a matter of immediate concern to Methone. It is inconceivable that the decree contemplated deferring the settlement of the question nine months or more. This argument applies with the same force against dating the inscription at this season in any year. It should be used also to disprove the date commonly given to the decree by the editors, the first prytany of a year, for even now the Dionysia are about nine months in the future.

Consequently, we must assume that the decree precedes the Dionysia just long enough for ambassadors to go to Methone and the court of Perdiccas, to stay there until they agree or disagree, and

[1] Thuc. IV, 82.

[2] West and Meritt, The Athenian Quota List, *I.G.* I², 216, *A.J.A.*, 1925, pp. 434–439.

[3] A valuable criterion for determining the assessment period to which a given undated list belongs is the form of the prescript. It is possible at times to use the appendices, too. In these respects, *I.G.* I², 216 and 218 are quite different. Thus they belong to different periods. For the appendices, see West and Meritt, The Athenian Quota List, *I.G.* I², 216, *A.J.A.*, 1925, pp. 434–439.

then to return, with a sufficient interval for the formalities and the despatch of a return embassy to reach Athens at the Dionysiac festival. We cannot give more than three months to this, and probably two months would have been more than sufficient.[1] Thus instead of dating the decree early in the Athenian year, we must assign it to the late winter months.

If we assign the decree to the winter months of 428–7 *I.G.* I², 216 may date in the spring of either 427 or 426. The difficulty with this date is the payment of tribute by Bottic towns in the year of *I.G.* I², 216. We have no reason for thinking that Athens had been strong enough to regain Bottic territory between 429 and 426.

We run into even more serious difficulties, if we date the decree in the winter of 429–8, for this would be about the time of Sitalces' expedition when it would have been very unlikely that Athens and Perdiccas were on terms of professed friendship such as the decree clearly implies. Moreover, it is altogether unlikely that Athens had gained any Bottic territory in the interval since her disastrous defeat before Spartolus. Thus we can eliminate this possibility without question.

Let us now assume that the decree was passed not long before the Dionysiac festival of 429. In this case, the assessment had taken place in the summer of 430. From the Old Oligarch we learn that assessments were made regularly about every four years,[2] and as the last two assessments came in 438 and 434,[3] there is no date more probable for an assessment than 430.

In the second place, the situation as regards Perdiccas and Athens was exactly the one we should expect from our decree. Perdiccas, though outwardly friendly to Athens, was in reality doing all that he could to weaken her position by encroachments upon Methone's territory. In the following summer he was pursuing the same tactics, and during the next autumn Sitalces took him to task for his disloyalty.[4] That the decree belongs in a period when Athens expected Perdiccas to listen to reason is obvious, and surely Athens would have been unduly naïve to expect compliance with her demands after the failure of Sitalces in 429.

Moreover, our date for the decree fits precisely into the situation at Potidaea. The siege there ended in the winter of 430–29.[5] Before the capture of the city, there were no soldiers in Potidaea. Like-

[1] Westermann, *Class. Phil.* V, 203 ff., has made an interesting study of the time necessary for ambassadors to go and come from Macedon. On the basis of *ephodia* records, he estimates thirteen days as ample for an embassy subject to no delays. Even the long delayed Athenian embassy to Philip in 346, Dem. XIX, 158, took only about seventy days, three months, if we accept Demosthenes at his face value.

[2] (Xen.) *Ath. Pol.* III, 5.

[3] Meritt, *A.J.A.*, 1925, pp. 292–298.

[4] Thuc. II, 80, 95.

[5] Thuc. II, 70.

wise, the date made possible for *I.G.* I², 216, spring of 429, accords with our knowledge of Athenian successes Thraceward. Athens had not then been forced to evacuate Bottice as a result of the defeat of Spartolus.[1] Pleume and Aioleion could now pay their tribute at the Dionysiac festival of 429.

Thus unless we wish to assume that there were three assessments in four years, 428, 427, or 426, and 425, in direct contradiction to the Old Oligarch who probably wrote in 425, we must date the assessment in 430, the Methone decree in the early months of 429, and *I.G.* I² 216 in the spring of 429. From this it follows with much probability that *I.G.* I², 218 is the quota list of 426–5, the first of the next assessment period. Although it may be urged against this date that we now have two assessments in successive years, this is in reality no objection, for the Old Oligarch was in no position to prophesy, when he wrote in 426–5,[2] that Cleon would radically change the system of quadrennial assessments and double the tribute within a year after he wrote. He was merely describing the practice of the past thirty years. In that period, if we are right, there had been but two exceptions to the rule as he puts it. One period lasted three years, 446–444. The next period lasted five, 443–439, thereby bringing back the regular scheme.[3] Moreover, the Old Oligarch qualifies his statement about quadrennial assessments in such a way as to admit of this slight variation.[4]

Another consequence of our date for the Methone decree leads to the problem of Methone's entry into the empire, for Methone at that time was in arrears. In other words, Methone had been made tributary before the assessment of 430. Aside from this precise bit of information we know nothing about Methone's history before 429. Our information for the Thracian region of the Athenian Empire is unusually complete for the years 436–5 to 432–1, for we have two complete quota lists for this period, one almost complete, and two more nearly half preserved. In none of these does Methone appear.[5] Consequently, it is almost certain that Methone was not a member of the Empire before the Peloponnesian War.

[1] Just when these towns were regained we cannot say. They are absent from the quota list of 432–1, *I.G.* I², 213. Although Phormio captured several small towns in 432, Thuc. I, 65, the quota list of the following spring gives no indication of such successes. Possibly the Chalcidian campaign of Hagno, Thuc. II, 58, was responsible for the gains in Bottic territory. The battle of Spartolus, 429, Thuc. II, 79, was undoubtedly followed by evacuation of Bottice.

[2] Since the treatise was evidently written before the affair at Pylos which began in the year 426–5, it is safe to say that the author knew nothing of the assessment of 425–4 when he wrote.

[3] Meritt, *A.J.A.*, 1925, pp. 247–273, 292–298.

[4] (Xen.) *Ath. Pol.* III, 5: τοῦτο δὲ γίγνεται ὡς τὰ πολλὰ δι' ἔτους πέμπτου.

[5] *I.G.* I², 210 and 213 give complete Thracian lists. *I.G.* I², 209 and 211 are about half complete, and *I.G.* I², 212 as given in the Corpus, has the Thracian panel without gaps. Nevertheless, there is some reason for thinking that there is a break of several lines at the top of the Thracian list.

We must conclude that Methone's admission came during the first two years of the fighting in the north, either in 432 when Athens was on the offensive against Perdiccas, or in 431 when Perdiccas came to terms with Athens. In 432 Therme was taken by Athens[1] and later in the summer an expedition was sent under Eucrates to keep Perdiccas from helping his allies in the Chalcidic peninsula.[2] Methone may have been taken then as a base of operations against Macedon on the western coast of the Thermaic Gulf. But Methone paid no quota in 431. Possibly she was in arrears for two payments.

In 431 Athens surrendered Therme to Perdiccas in return for his promise of assistance.[3] It is to this year, I think, that we must assign Methone's formal annexation, even though it may have been taken during the preceding campaign; and since Methone was either Macedonian or threatened by Macedon, we may assume that Athens asked and received guarantees with respect to Methone when she surrendered Therme. From the Methone decree itself we may infer some sort of agreement between Perdiccas and Athens about the city or at least a *modus vivendi*.

Thus Athens did nothing more than surrender territory at the head of the Thermaic Gulf in return for the extension of territory on the western shore where Aison and possibly the Eretrian Dicaea were situated. Both of these towns, like Methone, were granted exemption of tribute, except for the quota to the Goddess, as *I.G.*[2], 216 indicates.

In conclusion, our study of the Methone decree has shown that there was an assessment in 430, that *I.G.* I[2], 216 is the quota list of 430–29, and that Thucydides and these inscriptions are mutually corroborative.[4]

Allen B. West

Wheaton College

[1] Thuc. I, 61. In *I.G.* I[2], 208, a solitary *theta* in the third letter space has been responsible for the tentative restoration of Methone's name in that place, but there was a question in Kirchhoff's mind as to the reading. *I.G.* I[2], 208 was then dated during the first years of the war, when it was known from *I.G.* I[2], 216 and the Methone decree that Methone was in the empire. Now that we know *I.G.* I[2], 208 is a part of the quota list of 438–7, the restoration loses whatever of plausibility it possessed. For the date of *I.G.* I[2], 208, see West, *A.J.A.*, 1925, pp. 185 ff.

[2] West, *Class. Phil.* X, pp. 44 ff.

[3] Thuc. II, 29.

[4] Incidentally, since *I.G.* I[2], 216 records the payment of tribute by Thera, we must date its admission to the empire before the spring of 429. This opens for discussion the date of *I.G.* I[2], 65, dated usually in 425–4 because of a mention of Thera. *Cf.* West and Meritt, *A.J.A.*, 1925, pp. 434–439.

Archaeological
Institute
of America

A RESTORATION IN *I.G.* I², 213

In *I.G.* I², 213, Col. II, lines 61–63 (as in the Corpus) appears the prescript of the special category: *πόλ[ες αὐταὶ] φόρ[ον] ταχ[σάμεναι]*. This same category appears in *I.G.* I², 211 and 212, and on the analogy of these two inscriptions the Corpus has rightly restored in *I.G.* I², 213 the name [Σαρταῖοι] after the numeral ΔΔΓ of line 64, and the name [Ἀμόργιοι] after the numeral Η of line 66. The restored transcript in the Corpus reads as follows:

	Πόλ[ες αὐταὶ]
	φόρ[ον]
	ταχ[σάμεναι]
ΔΔΓ	[Σαρταῖοι]
ΔΓ⊢IIII	– – – – – – –
Η	[Ἀμόργιοι]
ΔΓ⊢[I]III	– – – – – – –
ΔΓ⊢[I]III	– – – – – – –

It is, I think, possible to restore also the missing names of lines 65, 67, and 68. It has been shown recently that the panel of names under the heading *ταῖσδε πόλεσιν οἱ ἰδιῶται ἔταχσαν* in *I.G.* I², 216 is exactly the same as the panel of names under *πόλεις ἅς οἱ ἰδιῶται ἐνέγραψαν φόρον φέρειν* in *I.G.* I², 211, except that the names of those cities which participated in the revolt of Bottice and Chalcidice do not appear in *I.G.* I², 216.[1] Now, *I.G.* I², 213 is from the first year of the revolt (432/1) and the same comparison may be made between the categories of *πόλεις αὐταὶ φόρον ταχσάμεναι* in *I.G.* I², 213 and in *I.G.* I², 211, and 212.

There are five cities listed in *I.G.* I², 211 and 212 with tithes of ΔΓ⊢IIII :*Κάσιοι*, *Καλλιπολῖται*, *Ἐτεοκαρπάθιοι*, *Χεδρώλιοι*, and *Πλευμῆς*. Of these five cities the *Κάσιοι*, *Ἐτεοκαρπάθιοι*, and *Καλλιπολῖται* are known to have been outside the area of the revolt of Bottice and Chalcidice, and these names should be restored in *I.G.* I², 213.[2]

The following restoration may be suggested:

ΔΔΓ	[Σαρταῖοι]
ΔΓ⊢IIII	[Κάσιοι]
Η	[Ἀμόργιοι]
ΔΓ⊢[I]III	[Καλλιπολῖται]
ΔΓ⊢[I]III	[Ἐτεοκαρπάθιοι]

A comparison of this list with *I.G.* I², 211 and 212 shows that of those cities which had been listed under the category of *πόλεις*

[1] West and Meritt, The Athenian Quota List, *I.G.* I², 216, *A.J.A.*, XXIX, pp. 434–439.

[2] This suggestion has been adopted in the Corpus. *Cf. addenda et corrigenda*, p. 303, *editio minor*, Vol. I.

αὐταὶ φόρον ταχσάμεναι the participants in the revolt of Bottice and Chalcidice were *Αἰολῖται*, *Γαλαῖοι*, *Μιλκώριοι*, *Φαρβήλιοι*, *Χεδρώλιοι*, and *Πλευμῆς*.

Knowledge of the *Αἰολῖται*, other than that furnished by the tribute lists, comes from fragment 156 of Theopompus. He is quoted in Stephanus of Byzantium as follows: *Αἰόλειον, τῆς Θρᾴκης χερρονήσου πόλις. Θεόπομπος ἐν Φιλιππικοῖς εἰκοστῇ τρίτῃ · ἐπορεύθη εἰς πόλιν Αἰόλειον τῆς Ἀττικῆς μὲν οὖσαν πολιτευομένην δὲ μετὰ τῶν Χαλκιδέων.* The word *Ἀττικῆς* has been corrected to *Βοττικῆς* by Meineke. The *Αἰολῖται*, therefore, were a Bottic people.

Gale was on the west coast of Sithonia, a short distance north of Torone.[1]

Μίλκωρος occurs in Stephanus of Byzantium also as *Μιάκωρος*. Fragment 174 of Theopompus, preserved by Stephanus, reads: *Μίλκωρος, Χαλκιδικὴ πόλις ἐν Θρᾴκῃ*, etc., or *Μιάκωρος, πόλις Χαλκιδική*. The town, therefore, belonged to Chalcidice, but its exact location is uncertain.[2] Leake assigns it merely to the interior of Chalcidice.[3] Kirchhoff (see map at the end of Vol. I of the old Corpus) is obviously wrong in placing Gale and Milcorus in that part of Thrace north of Samothrace. Kirchhoff's view was followed by Busolt, who restores, quite correctly, Δ⊢⊢⊢II [*Γαλαῖ*]*οι ἄτακτοι* in *I.G.* I^2, 210 on the analogy of *Μιλτώριοι ἄτακτο*[*ι*] in the same inscription, thinking that Gale and Milcorus were close together, as indeed they were.[4] But both towns were situated in the Macedonian peninsula in the area of the revolt of Bottice and Chalcidice. This fact is further established by the absence of these two names from *I.G.* I^2, 213.

Pharbelus (*I.G.* I^2, 202, 203, 204, 209, 210), Chedrolus (*I.G.* I^2, 210) and Pleume (*I.G.* I^2, 64, line 125) are known to have been in the Thracian district. Pharbelus, with its tithe of Γ⊢⊢⊢II, certainly did not appear in *I.G.* I^2, 213. Chedrolus and Pleume are both recorded with tithes of ΔΓ⊢IIII in *I.G.* I^2, 211 and 212, but of the five names recorded with this tithe under the prescript *πόλεις αὐταὶ* (*φόρον*) *ταχσάμεναι* of *I.G.* I^2, 211 and 212, the restoration of *Κάσιοι*, *Καλλιπολῖται*, and *Ἐτεοκαρπάθιοι* in *I.G.* I^2, 213 makes it seem probable that Chedrolus and Pleume were in the area of the revolt of Bottice and Chalcidice, and their absence from *I.G.* I^2, 213 may be explained in that way.

It is known that Athens made herself mistress of the coast of Chalcidice again soon after the revolt.[5] The appearance of Π[*λευμῆς*]

[1] Meritt, A Restoration in *I.G.* I, 37, *A.J.A.* XXIX, p. 27.
[2] Dimitsas, *Τοπογραφία τῆς Μακεδονίας*, p. 371.
[3] Leake, *Travels in Northern Greece*, Vol. III, p. 456.
[4] Busolt, Der Phoros der Athenischen Bündner, *Philologus*, XLI, p. 665.
[5] Meritt, A Restoration in *I.G.* I, 37, *A.J.A.*, XXIX, pp. 26–28.

and A[ἰ]ο[λῖτα]ι in *I.G.* I², 216, under the prescript *πόλεις αὐταὶ (φόρον) ταχσάμεναι* still further establishes that fact, and shows, at the same time, that these two cities were among those recaptured.[1]

Benjamin D. Meritt

Princeton University

[1] West and Meritt, The Athenian Quota List, *I.G.* I², 216, *A.J.A.*, XXIX, pp. 434–439.

BOOK REVIEWS

THE ROMAN TOGA, by *Lillian M. Wilson*, 132 pp., 102 Illustrations. The Johns Hopkins Press, Baltimore, 1924. $5.00.

The Romans were proud of themselves as the race that wore the toga. Cincinnatus, plowing behind his oxen on his little farm, sent to the house for his toga, which he draped round himself over his tunic, before he could listen to the deputies of the Senate proffer their nomination of him as dictator to save the state.

The impression is widespread that a toga is something like a bed sheet. Perhaps that idea has gained ground with the increasing production of Greek and Roman plays and their pictorial representations in papers and magazines. The use of a glorified or enlarged bed sheet has been all too common. The toga is rather a blanket, and if the reserves accumulated on the sideline benches of the college gridirons wore instead of their distinctive blankets ones of white or gray or brown with an occasional purplish or magenta stripe, they would look more like Romans than anyone else at the present time, except the blanket-clad American Indians at a ceremonial. Primitive peoples in general wore as an outer garment a blanket of some sort. A rectangular cloth was the simplest shape to weave, and a blanket thus made obviously could serve many purposes.

The Roman toga grew from a personal covering into a national bulwark. Its simplicity always remained, although fashion through a thousand years dictated many a changing nicety of fold and many an intricacy of drape. It would seem that there should be no difficulties in describing a Roman toga. But when one looks through Roman literature, as Dr. Wilson has done, all that is said turns out to be practically valueless so far as concerns exact measurements and cut, methods of making and technique of draping. As the author says, the literary reference to the Roman toga is casual. But the hundreds of Roman statues scattered in the museums of the world wear togas for the most part, and on many a well preserved piece of bas-relief, toga-clad figures stalk or stand in Roman *dignitas*. Here would seem to be ascertainable facts from figures.

The book here under review is the first of the Johns Hopkins University Studies in Archaeology, under the editorship of Professor David M. Robinson. Miss Wilson has studied the statues in every museum that has togated statues of appreciable worth and number. The 102 illustrations in a book of 132 pages speak for themselves.

The author, on pages 22 and 23, states her methods of approach to the subject of the Roman Toga on its technical side and the reasons behind her methods. She has not relied upon photographs; she has gone to hundreds of the togated statues themselves and measured and examined them. Then she has draped living models with togas of differing sizes and cut, until the togas of her models reproduced the characteristic lines of the sculptured garment. Probably no one would have disputed an *a priori* dogmatic statement that "neither the sculptors nor the painters of antiquity were producing fashion plates," but Miss Wilson has examined so carefully the mimetic exactness of the inevitable or characteristic lines, that she has also been able to distinguish the accidental and arbitrary folds of casual lines on the living model from the idealized or artistic lines on the garments of the marbled ancients. Her statement on page 25 cannot be controverted: "If a piece of drapery be placed on a human figure in the same manner as that shown on a sculptured figure, and it produces in all its parts the essential lines and folds shown on the statue, then the drapery must have practically the same size and shape as that which the sculptor used on his model."

The Roman toga is a piece of material with a longer and a shorter straight edge on the sides. The longer edge hangs over the left shoulder straight down the body in front. This upper or longer edge then comes across the back under the

right arm-pit, across the breast, and then again over the left shoulder and down the back. The garment curves from each end of the short straight edge to a varying point on the edge of the cloth at its greatest length. The many forms of the Roman toga through the centuries of its use all depend on modifications in length and width of the cloth and the variation of curve in the cloth as it met the ends of longer or shorter straight edges on the sides.

Miss Wilson begins with the simple drapery on the bronze statue at Florence of the third century B.C., known as the Arringatore. Here she establishes by trial her unit of measurement, which is the height of her model from the floor to the base of the neck in front. This unit of measurement bears a pretty regular proportion to the added measurement of the girth of a statue or model.

From the toga of the Arringatore the author goes to the larger toga of the Republican period and superposes the one on the other in a flat drawing to scale. This same method she applies to the toga of the ages she has chosen as representative.

The toga of the *Ara Pacis* of Augustus offers good examples for her third form of the toga, and the author shows that the change is in the easing or lengthening of the toga's upper edge, allowing a fullness of drapery in front which certainly makes the *sinus* so often mentioned in literature. Also for the first time on several figures in this *Ara Pacis* relief appears a small loop or boss near the waist line in front, which is believed to be the *umbo* of literature.

Miss Wilson devotes a chapter (III) to the Imperial Toga, where among other things it is shown that the large imperial toga at all events was woven in two pieces and seamed. The author closes her book with a brief appendix of "The Toga for Today", which gives practical suggestions based on her own experience for the use of interested students and teachers on Fabric, Color (the Roman *purpura* seems to approximate garnet or dark magenta), Making the Toga, and Draping. There are also eleven tables of dimensions which follow her diagrams.

The reviewer inclines to believe that Miss Wilson has made it unnecessary for anyone else to study the shape of the Roman toga and the way it was draped. She has gathered her literary data fully, she has studied the existing monuments carefully, and has applied to the study of the drapery the only sensible method there is. Her study looks like what is called a definitive piece of work.

R. V. D. Magoffin

New York University

Roman Buildings of the Republic, by *Tenny Frank*. 145 pp., 15 figs. Vol. III of Papers and Monographs of the American Academy in Rome, 1924.

Dr. Frank has written a book which is both brilliant and sound, on the dating of Roman buildings of the Republic from their materials.

The work is virtually a pioneer work in English and will, unless I greatly err, long be the *finis a qua* for future workers in this field. The author modestly calls his monograph a preliminary investigation and calls attention to the larger work on building materials of Rome that has been projected by the Carnegie Institution of Washington.

Why make a study of building materials in order to date certain monuments of undetermined age in Rome? Because just this criterion may furnish the clue to a sure chronology that can with certainty be provided neither by a study of style and technique alone, nor by a study of builders' devices and tricks, nor by a study of the measure of blocks. Indeed the latter practice may rest upon a wholly false assumption that the Romans used the Oscan foot, first. But as we add to these other criteria a minute study of the various kinds of tufa, determine

the quarry from which each kind comes, and discover as nearly as possible the age of these quarries, we may provide a surer foundation for historical accuracy.

The first chapter on Roman Tufas and Their Provenance is the best I have ever read on the subject. The literature on this subject is considerable. There are many treacherous pitfalls and the romantic study of geology and chemistry challenges the expert at every turn. It is interesting to note that Dr. Frank has made a collection of fifty specimens of tufas taken from Roman quarries and buildings, which have been placed in the Museum of the American Academy in Rome.

The following chapters discuss a great many buildings. The test of determining their dates and of basing a chronology upon kinds of stones used in existing remains is carried out with quite extraordinary skill. The great difficulties involved will be apparent to anyone reading, *e.g.*, the chapters on the Tullianum, the Vicinity of the Casa Romuli, or the Servian Wall. Nor will the reader find the arguments easy to follow in every case. Let us remember that the fragments of the old Apollo temple have been variously dated from the fifth to the second century B.C.; that the Tullianum has been assigned to the regal period, even to Mycenaean times, although Dr. Frank rightly places it in the third century B.C.; that the stele-inscription is here assigned to the sixth century, though it is generally placed in the fifth century B.C. Dr. Frank is convinced of the truth of the Roman tradition of a sixth century Palatine wall.

I have said enough to indicate the character of this book and my opinion of it. Though many points may be open to dispute, I should hail this work as bestowing highest credit upon American scholarship.

George D. Hadzsits

University of Pennsylvania

Greek Vase Paintings. Peintures de Vases Greques, by *G. von Luecken*, 16 pp. and 120 plates in collotype, large 4to. M. Nijhoff, The Hague, 1923. 100 guilders.

This collection of excellent plates made by a new method of reproduction does not attempt to rival the publication now being done under the auspices of the Union Internationale Académique. The 120 plates selected by von Luecken give for the most part unpublished vases from the collections in Berlin and Vienna. There are 71 plates from vases in Berlin, 44 from Vienna, 3 from Munich, and 1 each from Corneto and the Athens Museum.

These 120 plates are made by the new photometric process. The distorted foreshortenings that orthophotography gives because of the rounded surface of vases is almost entirely eliminated. This new process, too, being photographic, gives a certain feeling of confidence which tends to outweigh even the wonderful reproduction of Reichhold.

The 16 pages of text give a good but sketchy development of the technique of vase painting as illustrated by reference to certain of the plates.

It is to be hoped that von Luecken will be able to complete his plan and issue the vase pictures in German residences and university towns of which he knows so well the provenience.

R. V. D. Magoffin

New York University

Handbuch der Kunstgeschichte *von Anton Springer.* II, Frühchristliche Kunst und Mittelalter. Zwölfte, umgearbeitete Auflage bearbeitet *von Joseph Neuwirth,* pp. IX, 547, mit 719 Abbildungen im Text, 12 Farbendrucktafeln und 4 Tafeln in Lichtdruck, 1924. III, Die Kunst der Renaissance in Italien. Zwölfte, verbesserte und erweiterte Auflage bearbeitet *von Georg Gronau,* pp. XIV, 394, mit 362 Abbildungen im Text, 16 Farbendrucktafeln und 8 Tafeln in Lichtdruck, 1924. IV, Die Kunst der Renaissance im Norden, Barock und Rokoko. Elfte, verbesserte und erweitete auflage bearbeitet von Paul Schubring, pp. X, 405, mit 597 Abbildungen im Text, 19 Farbendrucktafeln und 8 Tafeln in Lichtdruck, 1923. Alfred Kröner Verlag, Leipzig. Each volume in cloth, 18 Marks, or $4.80.

Since the appearance in 1923 of the twelfth edition of Vol. I, *Das Altertum,* revised for the fourth time by Professor Paul Wolters of Munich (see writer's review, *A. J. P.,* XLV, I, 89–92), the above editions of Vols. II–IV of this justly famous *History of Art* have been published, and deserve the attention of American scholars and lovers of art.

The twelfth edition of Vol. II, as of the preceding seven, is the work of the veteran historian of art, Dr. Neuwirth, formerly Professor of the History of Art at the German University of Prague (1897–99), and since at the *Technische Hochschule* in Vienna, a scholar long known for his contributions, especially to the history of the art of Bohemia. The eleventh edition had been expanded by new material, especially the sections on Oriental Christian Art, and by adding an account of the art of Bulgaria and Russia to those on Byzantine Art. His last edition has kept pace with the latest results of art criticism, its contents being rearranged, many new text-cuts and four new plates being added, as well as a seven-page bibliography of essential works for further study. The contents are divided into three main parts, the first two relatively short: Early Christian Art (61 pp.), including an account of the early basilicas of Asia and Africa and their origin, art works in Rome, including paintings from basilicas and catacombs, mosaics, statues, and sarcophagus reliefs, and the monuments of Ravenna; Separation of Oriental and Western Art (75 pp.), treating of the Byzantine, Mohammedan, and Carolingian periods; and a larger section on the Development of National Styles, subdivided into (a) Architecture, Painting, Sculpture, and Industrial Art from the tenth to the thirteenth century (158 pp.), and (b) Gothic Art of the Middle Ages (228 pp.).

Vol. III has been prepared by the Director of the Cassel Gallery, who is well known for his many monographs on Italian artists. At the death of Adolph Philippi of Dresden in 1918, the editor of several preceding editions and a scholar known especially for his *Der Begriff der Renaissance,* 1912, Dr. Gronau completed the eleventh edition, 1920, altering the text by the addition of new matter and the revaluation of epochs, schools, and individual artists. Thus, he gave greater weight than Philippi had to certain sections, notably to the Sienese School of the Quatrocento, and to certain artists, *e.g.,* to the greatest of the *Wanderkünstler,* Piero della Francesca, whom he regarded as the greatest Italian painter south of Florence in the fifteenth century, a figure parallel to Jacopo della Quercia in sculpture. Unfortunately, owing to post-war conditions in Germany, he was unable to incorporate in that edition art criticisms appearing in foreign journals, and to add new illustrative matter to the text. These shortcomings have been overcome in the present revision, which shows an amplified text, many additional cuts, some from recent photographs to replace older ones, and others to illustrate the works of less known artists, eight new full-page plates, and, as a new feature, a bibliography. The work falls into four divisions: the first (40 pp.) deals with the masters of the thirteenth and fourteenth centuries, notably Niccolo of Pisa, Cimabue, and Giotto; the second (156 pp.) with the Early Renaissance, including

the great names in architecture, sculpture, and painting of the fifteenth century; the third (178 pp.) those of the great Cinquecento, with an account of the decline and end of the Renaissance; and lastly in a twelve-page summary with the artistic handicrafts, church ornamental objects, utensils, furniture, and objects in metal, wood, majolica, and glass.

Vol. IV has been brought to date by Professor Schubring of the *Technische Hochschule* in Hannover, the author of an extended list of books on Italian art and artists, and of a well-known *Cicerone* for the galleries of Florence, Milan, and Berlin. Much new material had been added to the two preceding editions, especially to the sections on the fifteenth to the sixteenth century, the tenth appearing in 1920 along with the eleventh edition of Vol. III. This last revision is still richer in illustrations and in the amplification of the text, notably in the sections devoted to German art, especially Baroque. Like Vol. II, Vol. IV is divided into three parts: the Renaissance in the North (74 pp.), the Renaissance outside Italy in the sixteenth century (136 pp.), and Baroque and Rococo in Italy, Spain, France, Netherlands, Germany, and England (180 pp.).

The illustrations in all these volumes, both in their selection and execution, are uniformly excellent, especially the full-page plates in color and phototype. One has only to glance at the Frontispiece of Vol. II (Interior of St. Sofia) to gauge the high standard of the former, and at Pl. IX of the same volume (Rheims Cathedral) to see the fine execution of the latter. The 1678 text-cuts are equally fine, and appear on almost every page in close proximity to the descriptive text. In fact the illustrations are the distinctive feature of the entire work, making the reading of the text a constant delight. Their great number can be understood when one remembers the origin of the Handbook—in merely a collection of illustrations with accompanying descriptions. The bibliographies, ranging from three to eight pages in length, are fairly full, and include books in many languages arranged to fit the corresponding sections of text. Their up-to-date character is shown by the fact that of the 215 works cited in the shortest, appended to Vol. IV, no less than nineteen have appeared between 1918–23. The full indexes are uniformly arranged in all four volumes, the names of places and artists appearing under one alphabet, the former easily distinguished from the latter by bold-faced type.

From many points of view Anton Springer's Handbook in its new dress is still the most authoritative and attractive account of the History of Art in popular form. The various revisers have again carried out the spirit of Professer Springer, and have once more laid the art-loving public of two continents under deep obligation.

A new edition of Vol. V, *Das Neunzehnte Jahrhundert*, has also appeared, but a copy has not yet reached me.

Walter Woodburn Hyde

University of Pennsylvania

Jacopo de Barbari, by *André de Hevesy*. pp. 52, 39 pls. G. Van Oest, Paris and Brussels. 1925.

The Master of the Caduceus, long known to students of early engraving, has only recently become a tangible figure as a painter. M. de Hevesy follows up important studies on the drawings of Jacopo, in the *Burlington Magazine*, with a concise monograph on the artist in all his activities. The publisher provides a characteristically fine book in quarto with thirty-nine collotype plates gathered at the end, comprising, with all the known paintings and drawings, a selection of the engravings. M. de Hevesy's study is a paragon of Gallic lucidity and elegance. It carries lightly a complete documentation; while within the strait limits of a

biographical sketch and *catalogue raisonné,* it suggests vividly the bizarre and intriguing personality that was Jacopo's. The artist indeed is of the disequilibrated type of a Piero di Cosimo or Amico Aspertini, an exotic in his native Venice. He apparently suffered, like other transitional painters from a certain half-heartedness, irony and dispersion of aims, through accepting the classical forms of the renaissance without understanding them or even believing in them; and, being a little master, he may have been further impaired by having to play the too heavy rôle of apostle of Italian culture in Germany and Flanders. So much for a problem too delicate for a review and too interesting to let alone. In so complete a work as this a fuller registration and discussion of the more serious attributions to Jacopo would have been fitting.

Frank J. Mather, Jr.
Princeton University

Histoire de la gravure dans les anciens Pays-Bas et dans les Provinces Belges, depuis les origines jusqu'à la fin du XVIIIe siècle. [Par] *A. J. J. Delen. Première partie*: Des origines à 1500. With 130 reproductions in heliogravure. Bruxelles: G. Van Oest, 1924. Price per volume, unbound, 150 francs.

La gravure en France au XVIIIe siècle. La gravure de genre et des mœurs. Par *Émile Dacier*. 140 pp., with 133 reproductions in heliogravure. Paris et Bruxelles: G. Van Oest, 1925. 150 francs.

The literature of prints is increasing rapidly. Sumptuous volumes of plates and modest handbooks, scholarly studies and popular guides, general works and studies of special countries or subjects of individual artists are coming from the presses in a steady procession. Smaller talents, not before separately treated, are dug from oblivion and presented in monographs. Topics are reconsidered with fresh zest, and old battles of experts are reopened.

In this productiveness, books on graphic art in the Netherlands are taking their place as part of a publishing movement in Belgium tending to fix in print the artistic glories of the Lowlands. Delen's book, perhaps even more than the one by M. J. Schretlen on Dutch and Flemish woodcuts (London, 1925), represents in part a rehabilitation, a restoring to the Netherlands, of prints formerly claimed as of German or French origin. The author makes his point a bit in the spirit of "stop thief," speaking of "narrow chauvinism" and "cynical spoliation." However, a number of his attributions were long since conceded by noted German and other authorities. Delen himself is not averse to entering the realm of suppositions that lures the expert of racial proclivities, but he also accentuates the frequent difficulty in definitely localizing or dating an old print. For the rest, his treatise is not only well documented, but is based also on much comparison of prints, and the very enthusiasm of his patriotism animates the recital of facts. Moreover, other arts of the Lowlands—painting, tapestry, goldsmithing, etc.—are cited in evidence. In fact, this interrelation of the arts is a very necessary factor in the study of old prints. As one looks over the good collotype plates, and the comments, these engravings emerge from the possible first impression of a uniform primitiveness into a varied technical and personal expression. That is so, even if you make allowance for an expert's enthusiasm for his specialty.

Dacier's book on a country and period already much and often written about, deals with its subject from the standpoint of social history. From that point of view, in fact, no treatment of this subject can get away very far, for this epoch in French prints so obviously mirrors its time, with its aims and tastes in art and in life. "None is more brilliant or more complete," says our author. Even in the

sub-specialty of *genre* art there is much diversity in subject and treatment. The sober yet sprightly pictures of bourgeois life by Chardin come down to us beside the ubiquitous *estampe galante* of Boucher and others, or the "slyly libertine" moralizing of Greuze. The possibilities of process were fully and widely exploited by the engravers,—line engraving, etching, stipple, aquatint, the "chalk manner," color work, and what not. All this product, much of it rare and precious to-day, was in its time sold cheaply (M. Dacier lists prices), "forming part of the usual decoration of life." From this standpoint of a buying contemporary public, the prints describing the manners and dress of that public are of particular significance. In them are reflected the gallant adventure, the sentimental pose of the time, as well as the sober intimacies of the life of the plain man. The well selected collotype plates are adequate reproductions, although for the student of prints they are not absolute facsimiles such as those in Lippmann's folios, nor even those in Courboin's *Histoire de la gravure française*, now in course of publication. That is partly due to reduction in size. The book is introduced by a lively presentation of carefully collected facts; one might well like to see the index to this which the author pronounces unnecessary. The rest of the volume is given over to descriptions of the plates, biographical notes on the engravers, and an index of painters whose works are reproduced.

The strong contrasts in expression of time and race offered by these two books make clear again the wide and varied interest inherent in prints.

Frank Weitenkampf

New York Public Library

The Parthenon: Its Science of Forms, by *Robert W. Gardner*, pp. 21, 11 plates. New York University Press, New York, 1925. $15.00.

Two years ago the reviewer surveyed the numerous mystic systems of proportion which have been applied to the Parthenon (*Architecture*, 1923, XLVII, pp. 177–180). Since that date the list of such books, already long, has been increased by two; "The Parthenon" of Mr. Hambidge has been surpassed by "The Parthenon" of Mr. Gardner, both in beauty of typography and in astounding complexity of illustration. Mr. Gardner's system purports to fit not only the Parthenon, but also —a merit which has been claimed for no earlier theory,—the entire Greek world! The centre of the natural world was marked by the omphalos at Delphi; but the centre of the world as planned geometrically by the Greek architects was exactly at the middle of the Parthenon. "It would seem," says the prospectus of the volume, "that the temple at Athens is but the central symbol of the Hellenic philosophy."

Thus we are told that the centre of the Parthenon was so located that its longitudinal and transverse axes, as well as "geodetic base lines" which were really the diagonals of "root-five rectangles" centred on the axes of the Parthenon, might be clearly indicated by natural or artificial "markers." By this means, "should every mark be effaced from the Acropolis, all could be restored by means of the distant markers and base lines on the sea and on the land, and with the key furnished by the law and the terms of the series." These "markers" include anything that the lines in question may happen to cross, mountain peaks or islands, distant cities or neighboring angles of city walls, pedestals above ground or a *Felsgrab* below, fortuitous remnants of ancient walls or even modern constructions,—the date makes no difference. One "geodetic base line" carried to the southeast sibilantly severs Sunium, Seriphos, Siphnos, Sammonium (Crete), and the Serapeum at Alexandria (Egypt)! It is regarded as particularly significant when the distance of any of these objects from the centre of the Parthenon happens to be the multiple of a Greek stadium length which, as will be shown below, no Greek even employed.

As for the design of the Parthenon itself, we are told that it was based on a "master square" of which the side was equivalent to the Attic foot, increased, for good measure, by a sixty-fourth of its length. Then, by the occult process of doubling its area four times, there resulted a square of sixteen times the previous area, a size appropriate for a metope. This metope, carved with a relief of Pegasus, was used as the key-note of the temple and was placed just to the left of the central triglyph on the east façade (all the other metopes being reduced in width to subordinate them). We are informed that the architect next derived from the width of the Pegasus metope, by the law of extreme and mean ratio, the axial spacing of the triglyphs; and that this, doubled, yielded the axial spacing of the columns and the height of the entablature (including the nose of the roof tile and the column capital). This latter square, furthermore, when treated as the third term in a system of squares of pentamerous increase (so that the unit square A has one twenty-fifth of its area), yields uccessive squares of which the areas progress inexact multiples of five; and these squares are stated to give the most important dimensions of the temple, both in plan and elevation. But the reviewer's doubts with regard to such a method of designing a temple are increased by the discovery of such di screpancies as 0.25 inch in the application of square B, 0.60 inch and 2.25 inches in C, 7.45 inches in D, 2.12 and 2.18 inches in E, and 5.25 inches in F.

The Parthenon, however, was merely the nucleus of a tremendous conception: "The whole plan of rebuilding the city, the walls, the temples, the Acropolis, the Parthenon, and the Piraeus, was conceived as a unit and so ultimately carried out." "From the structure of the Parthenon, the series broadens out to the enclosure of the Acropolis." "From the Acropolis, the geometric series extends out through the walled city." And thence the growth is extended to the confines of the Hellenic world. Two pentamerous series of squares are used, one (A, B, C, etc.) being that employed in the design of the Parthenon itself, while the other (A', B', C', etc.) was established by inscribing within each of the squares of the previous series a "root-five rectangle," of which the diagonal in each case was revolved to give the width of a new square which is stated to be "commensurable with the Attic foot and with the stadion." The perimeters of these two series of squares, and the maze of 45-degree diagonals and inscribed circles within them, as well as supposed remnants of older systems following other orientations, provide a network which necessarily intersects most of the known monuments of Athens (and elsewhere). Again it is immaterial whether they are natural features such as harbor entrances and islands and mountain peaks, or monuments early and late. Are we to assume that a copy of the plan was filed in the Prytaneum in order that all subsequent structures, underground cisterns or scattered blocks of stone, choragic columns and the Tower of the Winds, the stadium and a corner of the Olympieum precinct, or even the city of Alexandria in Egypt (on the 10,000 stadia square), might be properly located?

It would appear that skepticism as to such theories of art were not unexpected by the author; for he terminates with the statement that, "whatever the conclusions are as they may affect the realm of art, in the realm of science it will be seen that the theorem . . . (*i.e.*, the dimensions of the Parthenon may be mechanically determined by reference to three related series of squares) . . . has been demonstrated." But even in the realm of science, the very fact that the author is able to multiply $1\frac{1}{64}$ Attic feet (a side of his master square) by $4 \times 1.6180 \times 2 \times \sqrt{5} \times \frac{\sqrt{6}}{\sqrt{5}}$, and yet to obtain as a product exactly 32 Attic feet (his square D'), arouses doubt; the reviewer obtains rather 32.202 Attic feet. And the error rapidly increases, amounting to 282 Attic feet, for instance, in square M', or to 35,250 Attic feet in square S'. In other words, the final series of squares is incorrect; they are in no way related to the series from which it is assumed to have been generated; the author's

mathematical evolution is vitiated by the fact that, when the entire book is reduced to a single equation, $A' = \frac{6}{5} \times \frac{16}{25} Z^2 (1 + \sqrt{5})^2$, — wherein A' is the unit square of the final series and Z is the width of the original master square, $1\frac{1}{64}$ Attic feet, — we find that the area A' should be 8.296 rather than 8.192 square Attic feet. This initial error, which causes such vast discrepancies, amounts to $\frac{15}{64}$ inch in the width of an ordinary card table. In this final series, furthermore, alternate squares are measured in Attic stadia of $2 \times 5 \times 5 \times 5 \times \sqrt{5} = 559.02$ Attic feet; but the Attic stadion really contained 600 Attic feet! It is evident that the author, while adopting the reviewer's statement that the Attic foot had a length of about 327 millimetres, neglected to make a corresponding revision of his stadion length; instead he seems to have accepted the estimate of about 185 metres given by antiquated books (as the equivalent of 600 false Attic feet of $308\,^1/_3$ millimetres), adjusting it to the true Attic foot according to the principles of "dynamic symmetry." The actual size of square M', for instance, is 75.007 stadia rather than 80 stadia; not only are the "forty stadia markers," for which Mr. Gardner would have us search on the island of Stalida and the "Mountain of Pausanius," geometrically mislocated by 141 Attic feet; but true "forty stadia markers" would have to be sought 1639 Attic feet, or about 1758 English feet, farther out, in one case in the sea. Alexandria, really 586 miles from Athens, is located by the author at a distance of 625 miles (or, correcting the geometrical error, 629 miles), and so on the edge of a desert plateau forty miles inland; while if it were really on the perimeter of a 10,000 stadia square it would be 668 miles from Athens, in the desert barely northwest of the Great Pyramids of Gizeh. Such errors, which occur in all the squares of the last series, invalidate the entire "scientific, geodetic system of measurements, national in its scope, philosophical in its conception, and broad enough to include the whole Hellenic world of the day." Before issuing a book which is claimed to "indicate to the archaeologist where to search for yet undiscovered remains," the New York University Press should at least have made reasonably certain that the mathematical processes were not as novel as the artistic theories.

William Bell Dinsmoor

Columbia University

The Vanished Cities of Arabia, by *Mrs. Stewart Erskine.* Illustrated by *Major Benton Fletcher*, pp. 324, 51 plates, second edition. E. P. Dutton & Co., New York, 1925. $6.00.

The vanished cities of Arabia with which the author is specially concerned are Petra, Kerak, Aroer and Machaerus, Madeba, Raboth Ammon, Philadelphia, The Decapolis and Jerash. It is a delightful travel book but will not stand too critical an examination from the archaeological standpoint.

Mrs. Erskine is at her best in describing natural beauties or conveying impressions of a particular site. Less successful are her attempts to create the appearance of a place which she has not visited, such as Aroer, for which she must depend on the information of others. With the personal touch lacking, the picture becomes quite intangible.

Some of her descriptions are very sketchy. One would like to know a little more about the mosaic pavement at Madeba, so tantalizingly referred to on page 161, and a description of the capital "not quite like any other," which she says the Nabataeans invented (page 40), would not have been amiss. It is annoying, too, to come across quotations with no indication of the source or even, sometimes, of the author's name.

In speaking of the Temple of Artemis at Jerash she says (page 255), "as a wan-

derer intent rather on the impression of the moment, as it is inspired by the passing scene, and without that inner knowledge which alone makes a treatise on architecture worth reading, I must deal lightly with details." One wishes that the author had maintained this position throughout, thus avoiding the controversy over the date and origin of the Khazne Fur'un at Petra (pages 55–6).

The triumphal gate at Jerash is discussed at some length and attention is called to the acanthus leaves at the base of the columns. The author points out the similarity to the votive column at Delphi which rose from a calyx of acanthus leaves and supported caryatid figures carrying a tripod. She suggests that the columns of the triumphal arch may likewise have supported figures. This is quite impossible since in the case of the arch at Jerash we are dealing with engaged columns which have a definite architectural function, namely, the support of the entablature.

On page 224 the author refers to "the report of the Princetown Expedition" which should be the *Publications of the Princeton Archaeological Expedition to Syria.*

The sites which played an important part in Mediaeval times must have made a special appeal to Mrs. Erskine. *Kerak Besieged* is the most thrilling and vivid chapter of all.

The value of the book is greatly enhanced by the artistic line drawings and glowing color plates by Major Fletcher.

Kate McK. Elderkin

Princeton

ARCHAEOLOGICAL DISCUSSIONS[1]

SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

Edward H. Heffner, *Editor*
University of Pennsylvania, Philadelphia

GENERAL AND MISCELLANEOUS

On Ancient Rhytons.—A group of rhytons which are alike in standing upright and in having the small end capped by the forepart of a deer or a deer-like animal, is discussed by F. W. v. Bissing in *Arch. Anz.*, 1923/4, pt. 1 (cols. 106–109). They date from before 1750 to the fifth century B.C., and were made of silver or silver and gold in Asia Minor and Persia and imitated in clay and glass paste in Egypt. The shape is undoubtedly derived from the horns of animals used for drinking.

A Painted Chinese Jar from the Tomb of the Later Han Period.—In *B. Metr. Mus.*, XIX, 11, 273–274 (3 figs.), S. C. B. R(eitz) discusses a jar in the Metropolitan Museum belonging to a pair the other of which is in the British Museum. Round the body of the jar is a broad band containing a realistic hunting scene drawn upon white chalk and filled in with other colors. On the neck of the vessel are two bands containing lozenge decorations, while on the rim is a leaf decoration. The jar is described as a specimen of the earliest known Chinese painting, which is remarkably skilfully executed.

A Parthian Hoard of Coins.—No detailed study of a Parthian hoard has heretofore been published; but the recent discovery of such a collection near the town of Mandali, on the Persian border of Irak, gives E. T. Newell opportunity to discuss thoroughly three hundred and four pieces from that source. Since they came under his cognizance, fifty-seven more from the same hoard have appeared, and it is believed that a large number of yet others have been acquired by a collector in Persia. The three hundred and four are Seleucid, Cappadocian, Bactrian, Alexandrine, and Parthian. The earliest coins are three Alexandrines of about 310 B.C.; the latest dated is of 99–98 B.C. The hoard was probably buried between 90 and 85 B.C. The study adds decidedly to our knowledge of the history of the period, and "offers a most welcome and complete corroboration of Wroth's theory on the probable distribution of certain coins among the five Parthian kings from Mithradates I to Mithradates II" (*Num. Chron.*, 1924, pp. 141–180; 6 pl.).

Scythian Bronzes.—In *B. Metr. Mus.*, XIX, 12, 296–298 (4 figs.), S. C. B. R(eitz) discusses several pieces of bronze of the pure Scytho-Sarmatian type lately acquired by the Metropolitan Museum and found in southern Mongolia and possessing unusual interest. A round plaque covered with a sheet of gold shows

[1] The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor Heffner, Editor-in-charge, assisted by Professor Samuel E. Bassett, Professor C. N. Brown, Miss Mary H. Buckingham, Professor Sidney N. Deane, Professor Harold N. Fowler, Dr. Stephen B. Luce, Professor Clarence Manning, Professor Elmer T. Merrill, Professor Lewis B. Paton, Professor John C. Rolfe, Professor John Shapley, Professor A. L. Wheeler, and the Editors.

No attempt is made to include in this number of the Journal material published after June 30, 1925.

For an explanation of the abbreviations, see pp. 115–116.

a bear clutching two rams. The artistic qualities are good, and the work is associated with the Scythian art that developed under classic influence in southern Russia. With this is compared the Phalère d'Auvers in the Cabinet des Médailles in Paris, which was described in the *Revue Archéologique* as a roundel, a part of a harness. The piece is valuable for the study of the relations between the Gallic and Sarmatian tribes. A gilt-bronze clasp shows two winged galloping horses. The wings of the horses remind one of Pegasus, as does also the boldness of the modeling. This classic influence is explained as being probably Bactrian. A large silver-plated bronze buckle is described as the best illustration of the pure Chinese type with strong Scythian influence.

THRACE.—Monuments of Religious Syncretism.—In *Bulletin de l'Institut archéologique bulgare*, I, 2 (1921–22), pp. 137–145, GAVRIL I. KATSAROV describes several fragments bearing figures which can be related with the cults of ancient Thrace and often identified with the Kabiri. The largest of these gives a fairly complete rendering (though some figures are indistinct) of two horsemen with a female figure in the centre and a male figure on either side. He follows Rostovtsev in denying these fragments to the Kabiri cult and points out similarities with the cult of Mithras and other Iranian and Semitic deities. The whole works show the fusion of several different elements in Thrace in ancient times.

EGYPT

The Ancient Libyans according to Egyptian Sources.—In *Z. D. Morgenl. Ges.*, LXXVIII, 1924, pp. 36–63, G. MÖLLER gathers up all the references to the Libyans in Egyptian inscriptions, and illuminates these from classical and ethnological sources. The comprehensive name for Libyans in Egyptian is *Teḥenu*. They first appear in pre-dynastic inscriptions. They are depicted with dark skins and dark hair. Men and women alike wear a curl on the forehead, a necklace, two broad leather bands crossing the breast, and a wide girdle to which a phallus pocket is attached. Even the women wear this pocket over a small apron, probably as a symbol of royal authority, like the male attire worn by Queen Hatshepsut. This costume resembles the earliest Egyptian, and linguistically and in other ways there was a close connection between the Egyptians and the Libyans. About 2400 B.C. the new clan of the *Tuimah* appears among the Libyans. These are represented as blond and blue-eyed. They wear caps of ostrich skin, and tunics that reach to the knee. These are to be regarded as immigrants from Europe who largely displaced the primitive Hamitic Libyan population. Both ethnological types continue to appear in the later inscriptions, and continue down to the present time.

The Prostrate Figure in Egyptian Art—The motive of the fallen or falling human figure, in four types (fallen backward, fallen forward, and half raised from each of these positions), as developed in Egyptian art from the primitive period through the Old, Middle, and New Kingdoms, is discussed by F. MATZ in *Jb. Arch. I.*, XXXVIII/IX, 1923/24, pt. 1/2 (pp. 1–27; fig.). In the earliest stage, as with children, delineation was constructive, the field answering for horizontal as well as vertical space, without any foreshortening, so that a figure lying on the ground at a right angle to the horizon might seem to be standing on its head, while a cart would show four wheels, one at each corner of the body. During the third, fourth, and fifth Dynasties, the principle of the side view, the nearer side of an object hiding the farther side, came to be better understood, and the system of zones, one above another, to show actions at different distances from the spectator, was adopted; but true perspective was never fully mastered in Egypt. This same period evolved the arbitrary representation of the human figure as a combination of profile, full-front, and three-quarter positions, which persisted to the end, with

only slight modifications. The skill with which this conventional scheme was preserved in a great variety of attitudes, expressive even of emotions, is illustrated by numerous examples from all periods.

SYRIA AND PALESTINE

The Amorites in Western Asia.—In *J.A.O.S.*, XLV, 1925, pp. 1–38, G. A. Barton subjects A. T. Clay's theory of the antiquity and importance of Amorite civilization to a thoroughgoing criticism. In four elaborate works Clay maintains that the Amorites of Syria possessed a civilization older than that of Babylonia or Egypt, that Amurru was the cradle from which the Semites migrated, that they were the originators of Babylonian civilization, and that from them, and not from the Babylonians, the Hebrews derived the Biblical traditions which bear so close a resemblance to Babylonian traditions.

In opposition to this view Barton maintains: (1) that evidence is accumulating that Arabia was the cradle of the Semites, from the similarity of Hamitic and Semitic languages, from the occurrence of proper names of an Amorite and Hebrew type in the S. Arabian inscriptions, and from the fact that at least three historical Semitic migrations, the Hebrew, the Nabatean, and the Muhammadan Arab, were made out of Arabia. (2) In texts of the time of Ashurbanipal (*mat*) *Mar-tu* (*ki*), the Amorite land, is equated with (*mat*) *Mar* (*ki*), the land of Mari; from which Clay infers that the dynasty of Mari that flourished in Babylonia in the fourth millenium B.C., according to the dynastic lists, was of Amorite origin. This inference is unwarranted because *Mar* is merely an abbreviation of *Mar-tu* without any idea of identifying Amurru with *Mar* which had disappeared from history fifteen hundred years before. Clay claims that the dynasty of Mari was Amorite. A ruler of Mari in the twenty-fourth century bears a Semitic name, but this is no evidence that the city was occupied by Semites one thousand years earlier. The only early name that we have from Mari is Sumerian. (3) The dynasty of Agade was certainly Semitic, but there is no evidence that it was West-Semitic, that is Amorite. On the contrary, all the Semitic proper names in inscriptions between 3000 and 2500 B.C. are Akkadian, this is, East-Semitic. From this it follows, either that the Akkadians were East-Semitic, or that, if they were Amorites, they were destitute of civilization and adopted the language and the culture of the East Semites. (4) After 2500 we find clear evidence of Amorites in Babylonia, and their gods are connected with creation and other myths, but this does not prove that these myths were brought into Babylonia by the Amorites, but only that they adapted existing Sumerian myths to the cult of their own deities. In this connection attention should be called to E. Chiera's *Sumerian Religious Texts*, *Crozer Theological Seminary Babylonian Publications*, Vol. I. No. 8 of these texts is an Amorite creation-story in Sumerian. The Amorite editor seeks to adapt old Sumerian material to the praise of the Amorite god Martu. "However, in recounting the good works of Martu, the writer cannot refrain from mentioning the former uncivilized condition of the Amorite people. In fact, in telling of the eating of uncooked food, and the practise of not burying the dead, he goes far beyond what other Sumerian literature had told us about the Amorites."

An Ancient Phoenician Navigation Company.—In the "Travels of Un-amun (Wen-Amon)," about 1100 B.C., the king of Gebal says to the Egyptian ambassador: "In this Sidon by which thou hast passed there are fifty (or even ten thousand?) ships which belong to the company (*ḥeber*) with Birkat-el." In *Z. D. Morgenl. Ges.*, LXXVIII, 1924, pp. 61–63, R. Eisler calls attention to the fact that substantially the same name for a shipping firm occurs in the Testament of Naphtali: "This ship belongs to the son of Barak-el, together with all the valuables that are in it." Whether this indicates that the firm of Barak-el, Sons, and Co.,

continued to exist from 1100 B.C. down to 150 B.C., three times as long as the oldest English and Hanseatic maritime companies, is doubtful. It shows at least that memory of this famous old shipping house lingered in Hellenistic Phoenicia. A parallel is seen in the Babylonian banking houses of Muraššu Sons, and Egibi Sons, whose records were discovered at Nippur.

The Early Sinaitic Inscriptions.—In 1906 Petrie published several inscriptions from the traditional Sinai in an unknown script that he assigned to the time of the eighteenth dynasty. These have since been made the subject of elaborate study by Gardiner, Peet, von Bissing, Sethe, Bauer, Eisler, Völter, and Hans Jensen, all of whom have regarded this as a forerunner of the Semitic alphabet developed out of Egyptian, but who have reached very different conclusions in regard to the values of the signs and the meaning of the inscriptions. One of the most recent attempts is that of H. Grimme, *Althebräische Inschriften von Sinai*, 1923, who reaches the conclusion that these inscriptions date from the time of Moses. No. 350, in particular, he translates: "I am the foster-son (mōsē) of Hatshepsut, chief of the miners, prince of the temple of Ma'na and of Yahweh of Sinai. O Hatshepsut, beloved of the Ba'alat, thou wast kind to me, thou hast drawn me out of the Nile, and thou hast set me over the pronaos of M."

These conclusions are subjected to an elaborate criticism by J. B. Schaumberger, in *Biblia*, VI, 1925, pp. 26–49, who comes to the conclusion that the system by which Grimme has identified the Sinaitic characters with Egyptian hieratic signs is highly artificial, that his assumption that the letters stand in no regular order left to right, right to left, or boustrophedon, is most unnatural, that his identifications of characters are not consistent with his own system, and that, therefore, his translations are uncertain to the last degree. Though much exploited by the newspapers, this alleged Mosaic inscription has no scientific standing.

The Eyes of the Cherub.—The general meaning of the cherub is clear. It is the thunder-cloud on which Yahweh rides, viewed as a living chariot, and described in terms of Egypto-Hittite Phoenician art. But what is the meaning of the eyes with which, according to Ezek. 1: 18; 10: 12, both the cherubs and their wheels were covered? In *Arch. Rel. Wiss.*, XXII, 1924, pp. 257–265, A. Jacoby shows that the numerous eyes that are ascribed to God, or celestial beings, are found not only in the Hebrew cherubs, but also in Egypt, Persia, India, and Greece. The symbol is closely connected with the starry heavens, whose stars are regarded as eyes of the deity, or of his servants, and express the divine omniscience, whose numerous eyes nothing escapes.

Frescoes from Sâlihîyeh.—In *Rend. Acc. Lincei*, XXXII, 212–216, Franz Cumont discusses a series of frescoes discovered at Sâlihîyeh on the right bank of the Euphrates, midway between Aleppo and Bagdad. They adorned a temple of the city of Dura, which was called by the Greeks Europos and which formed part of the state of Palmyra. These frescoes were first hurriedly studied and photographed by James Breasted, of Chicago, at the time of the British occupation of Palestine, but the abandoning of the place by the English a few hours after his arrival cut his studies short. A more satisfactory photograph has since been taken. The temple thus decorated was consecrated to Zeus, Jarhibol, and Aglibol. One fresco represents two Semitic priests clothed in white and discharging their office with bare feet according to their rite; one is dipping a green branch in a jar and the other places incense on a blazing altar. On the same side of the temple is a similar fresco with three figures. These paintings date from the first century of our era and the name of the artist is given as Ilasamsos. Cumont feels that these paintings are of very great importance in investigating the origins of Byzantine art.

Opposite these is a series of a very different type, which dates from Roman

times, about the close of the second century, or the beginning of the third. Before an altar stands an official clothed in a white tunic with a red border, and holding a sword, but without either helmet or cuirass. At the side of the figure are the words *Iulius Terentius tribunus*. Near him stand eight of his officers and a group of fifteen of his soldiers, who are equipped much as their commander. Near him stands a figure inscribed Θέμης Μοκίμου ἱερεύς. In the background are three statues of divinities with nimbi, and wearing the usual Roman military costume with cuirass, paludamentum, laced shoes, etc. These were at first thought to be *imperatores*, but Clermont-Ganneau thinks that they represent rather the three gods Bêl, Jarhibol, and Aglibol, thus Romanized for the sake of the army. At the feet of the statues sit two female figures inscribed the Tyche of Dura and the Tyche of Palmyra, with other symbolic figures. These are obviously in imitation of the famous group of Eutychides representing Antioch sitting on its hill beside the Orontes. A Latin inscription states that the painting is a dedicatory offering to the Emperor Alexander Severus (239 A.D.). We thus see that the Roman occupation extended further into the Syrian desert than we had before imagined, controlling the entrance into Mesopotamia.

What Has Become of the Philistines?—In *Pal. Ex. Fund*, LVII, 1925, pp. 37–45, 68–79 (4 figs.), R. N. SALAMAN discusses the three distinct racial types that are found among the modern Jews. The first of these is the Semitic type, with a long face and long nose that is not hooked, like the pure Bedawy Arab type and the early Egyptian representations of Semites. It goes back to the pure-blooded primitive Hebrew invaders of Canaan and to Semitic Amorite admixtures. It is exhibited by only fifteen per cent of modern Jews. Second, the Hittite, or Armenoid type. This has a round face and large hooked nose, exactly like the Hittite sculptures and the Egyptian representations of Hittites. It goes back to the aboriginal pre-Semitic population of Canaan and to the Hittite invaders. It is found in fifty per cent of modern Jews, and has come to be regarded as the characteristically Jewish type of face. Third, the Pseudo-Gentile type. Among Jews of the purest Jewish descent about twenty per cent show a fair-skinned, long-headed type, with small, delicate features and Greek noses. These could easily pass as Gentiles. This type is not due to Teutonic admixture in Europe, since in mixed marriages the Teutonic type is dominant, while the Pseudo-Gentile type is recessive. It is due to the absorption of the Philistines by Israel. The Philistines came from Crete, and their racial type as depicted in the Cretan and the Egyptian monuments was identical with the modern Pseudo-Gentile Jewish type.

GREECE

ARCHITECTURE

On the Temple of Zeus at Olympia.—The peculiar construction of the foundations of the middle portion of the cella of the temple of Zeus is discussed by K. LEHMANN-HARTLEBEN in *Jb. Arch. I.*, XXXVIII/IX, 1923/24, pt. 1/2 (pp. 37–48; 5 figs.). Here a square space, of the full width of the nave and immediately in front of the enclosure containing the chryselephantine statue of Phidias, was paved with black Eleusinian marble resting on a solid foundation of poros blocks into which were inlaid eight wide longitudinal stripes of white limestone blocks. From the cuttings and projections on the surface of these limestone blocks it is evident that they served to support various dedicated statues or other heavy objects, which were arranged with some symmetry and with regard to the convenience of visitors. A somewhat similar arrangement of rows of limestone blocks, but laid only in earth, is found in the temple of Asclepius at Epidaurus, and elsewhere. Evidently when a famous temple was rebuilt, the works of art that had been dedicated in the older temple were gathered together in a space

reserved for this purpose in the new building, as in the Heraeum at Olympia, where the Hermes was found; and this was a feature of the temple of Zeus when built by Libon. When the great work of Phidias was installed, these lesser statues were removed and the dark pavement was laid, to enhance the effect of the shining gold and ivory.

SCULPTURE

Antiquities in the Park at Wörlitz.—Some pieces from the collection of antiques at Wörlitz, which was divided in 1918, are described by K. Schulze-Wollgast in *Arch. Anz.*, 1923/24, pt. 1/2 (cols. 24–38). A broken low relief of three youths carrying off a female captive, which probably represents the sacrifice of Polyxena, is not very skilful work, but bears some resemblance to the frieze of the Monument of Lysicrates (334 B.C.). A Hellenistic relief of a winged boy standing before a doorway in a wall of ashlar masonry and rescuing a cock from its antagonist, appears to represent the god Agon, erected by the victor in a cock fight. Two small bronze figures of Athena and Aphrodite belong to the end of the second century A.D. A seated Fortuna with a snake around the right arm and showing traces of red paint, resembles the reliefs on the Arch of Trajan at Beneventum.

A Copy of the Head of the Ludovisi Ares.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, pp. 203–221 (pl.; 7 figs.), C. Praschniker publishes a marble head found in 1916, built into a wall at the convent of Ardenica in central Albania. He identifies it as a copy of the head of the Ludovisi Ares. It dates from early in the third century B.C. The Petworth Aphrodite head is closely related to it.

The Establishment of the Classical Type in Greek Art.—An epitome of more extensive studies on this subject, by Charles Walston, is published in *J.H.S.*, XLIV, 1924 (pp. 223–253; 17 figs.). The traditional, pre-Hellenic, or "Minoan" type of the human figure,—the triangular torso with wasp waist accentuated by overdevelopment of the lower parts, the triangular face with long, pointed nose and retreating forehead and chin, and the round eye in flat, almond-shaped socket,—is shown in perfection in frescoes from Cnossus and other Cretan and Mycenaean remains. It is the type of the *acrobat*, especially the *toreador*, and it dominated all art in its time, because it represented the sport most pleasing to royalty. The growth of democracy in Greece, with its love of truth and its need of the personal service to the state of each individual, developed as its ideal the perfect physical type of the *ephebus*, the youthful athlete, through the palaestra and the agonistic games. These two institutions gave artists the opportunity of studying not only the naturally developed figure but every possible attitude and movement as well as the occasion for exercising their skill in commemorating victories and the scenes of the palaestra. During the century from the middle of the sixth to the middle of the fifth century B.C. the process of eliminating the unreal and conventional element from works of art was going on, more rapidly in the last thirty years, until the "classical" type was finally established in the time of Phidias and the Parthenon sculptures. Almost all works down to this time show traces of the inherited style, the shapes of head and eye retaining the archaic touch longer than the body. The female nude figure and drapery also followed the development of the male type, not quite *pari passu*. The influence of religion, always conservative, and its kindred feeling of reverence for the state, retarded the full use of the artists' increasing skill in realism, as is shown by the occurrence in the same period and in the same composition, of the archaic type for divinities or for the ideal (youthful) citizen, with extremely realistic types of centaurs, satyrs, negroes, old people, and other minor figures. This conservatism was especially strong in Attica, and Argos first attained entire freedom and naturalness; the "classical" type of head, with a half-square shape for the front half, only the tip of the nose breaking the vertical line of the face, is Polyclitan, and Athenian

sculptors, like Alcamenes and Phidias, learned it at Argos, in the school of Ageladas. The complete transition in the work of these two artists falls between the East and West pediments of the temple of Zeus at Olympia and between the metopes and the frieze of the Parthenon. A faint reminiscence of the Attic preference for the elongated or "animal" type of face is still traceable in the fourth century in the long heads of Praxiteles, contrasted with the round heads of Lysippus. In the third century, in the schools of Rhodes and Pergamon, realism was unshackled. The various stages and branches of this development, especially in sculpture and vase-painting, are fully illustrated here by cuts and by references to other publications.

The Master of the Niobe Group.—In early and fifth-century Greek art, the story of Niobe was represented only by the figures of the avenging deities Apollo and Artemis, and the children upon whom the punishment fell. It belonged to the type of battle scenes. But in the great fourth-century group, to which the originals of the Niobid statues at Florence belonged, the emphasis had passed over from movement to sentiment; Niobe herself was the principal figure and the centre of the whole composition, or rather she stood at the apex of a pyramidal group in which the bases of the separate figures were at different heights, while the gods who shot their arrows from heaven were not shown. Certain characteristics of these statues and other works, such as the diagonal action of the figure, the upraised, protecting arm, and the fall of draperies, point to a common origin, namely the artist Timotheus, for a group of sculptures which includes the well-known Leda and the Swan, the grave stele of Aristonautes and the female head from the south slope of the Acropolis at Athens, the Epidaurian sculptures, and certain portions of the frieze of the Mausoleum at Halicarnassus. Timotheus, although he shared with Scopas and the two younger men, perhaps their pupils, the most important artistic commission of the century, was not reckoned among the artists of the first rank. His forte is a sort of external pathos, expressed in the figure rather than in the face, as with Scopas; and it finds its highest development in the Niobe group. F. WINTER, *Jb. Arch. I.*, XXXVIII/LX, 1923/4, pt. 1/2 (pp. 49–57, double plate; fig.)

The Nike of Paeonius at Delphi.—In *Jb. Arch. I.*, XXXVII, 1923, pt. 3/4 (pp. 55–112; 16 figs.), H. POMTOW gives the results and the details of an intensive study of all the evidence, epigraphical, archaeological, and historical, for the bronze statue of Victory by Paeonius at Delphi. This involves a reconstruction and comparison of the two triangular pillars at Delphi and Olympia with their inscriptions, a discussion of Grüttner's (1919) restoration of the marble statute at Olympia, the noting of errors in the re-erecting of the Delphian pillar with plaster and of the loss of important inscribed fragments at Delphi, and a sketch of the later history of Delphi down to its total destruction by earthquake in the sixth century A.D. The original Nike of Paeonius was a bronze statue erected at Delphi in 425 B.C. by the Messenians and Naupactians as a thank-offering for victories at Leucas, Ambracia, and Olpae, where they had fought as allies of the Athenians in the preceding summer and winter. At about the same time they ordered a marble replica of the statue in honor of the victory at Sphacteria (June, 425), in which also they had a share. The Athenians meanwhile erected two bronze Victories on the Acropolis, presumably in front of the Temple of Victory, one for Sphacteria and the second for various operations on the west coast during 426 and 425, partly the same as those commemorated by the Messenians at Delphi. The second of the Athenian statues and the Messenians' bronze statue were both repaired about a century later by Menecrates of Thebes. These facts can be traced in fragments of the original inscriptions, helped out by literary tradition. When, after the truce of 423, Olympia was opened to the allies of Athens, the Athenians erected the marble Victory there, as a political demonstration against Sparta, though the general expression *ἀπὸ τῶν πολεμίων*

was used in the dedication. The two statues of Paeonius were over life-size and were supported by tall, slender pillars on which they seem to have alighted from flight. In each case the three-sided pillar, of Pentelic marble resting upon a rectangular ground-base of red sandstone, consisted of a high basement or pedestal of three blocks of marble with vertical sides but slightly stepped back, then a lower moulding, then the slightly tapering shaft of eleven or twelve blocks, and an anta capital. The capital was ornamented with patterns in colors and each face of the shaft bore a bronze shield near the top,—at Delphi the tall Spartan shield, at Olympia, round. The pillar at Olympia was slightly thicker than at Delphi, about 6 cm. in each horizontal measurement, because of the greater weight of the marble figure. The statue with the conical base necessary to prevent the feet from being hidden at so great a height, measured about nine feet out of the total of thirty-nine or forty Greek feet for the whole monument. The bronze statue was gilded, the marble one tinted and painted. There are remains of purple on the inside of the mantle and pink on the chiton. The monument at Delphi stood in the corner at the west end of the Stoa of the Athenians, facing southwest towards the Sacred Way and close in front of the polygonal wall, some fifteen feet high, which supports the middle terrace, and with the still higher Temple of Apollo as background for the statue. At Olympia the background of the open sky made necessary, for the proper effect, the white and polychrome marble. The dedicatory inscription and sculptor's signature were on the main face, some ten or twelve feet from the ground. The line about the contest for acroteria which follows the signature at Olympia was a nearly contemporary addition. The inscriptions were in the Dorian dialect because that was the speech of the dedicators, but Ionian in spelling because arranged by Paeonius of Mende, an Ionian town, while the forms of letters vary, as ⊙, ⊕, because cut by local workmen. On the block above the original inscription at Delphi, and presumably on a bronze tablet inserted in a corresponding position on the shaft at Olympia, was a second dedication, perhaps metrical and perhaps added after the liberation of Messenia. The Menecrates signature was below. In later times, as was the custom with all blank surfaces at Delphi, the sides of the monuments were used to record proxenies and other honorary decrees of the Messenians and Naupactians. The whole idea of the tall, slender, three-sided pillar seems to have been original with Paeonius, but it was imitated by Phryne when she dedicated her own statue by Praxiteles at Delphi two generations later, and other gilded statues on similar high monuments were erected there in later centuries. Christianity was introduced at Delphi in the first half of the fifth century A.D., and a bishopric established there. The great Temple of Apollo was used as a Christian church with but slight alterations, only an additional cross-wall in the foundations marking the line of division for the choir. Delphi lay in an earthquake zone which stretched nearly east and west across central Greece from Patrae to Chalcis and Eretria, passing north of Attica; but in spite of numerous lesser shocks, the chief buildings and monuments of the sanctuary remained substantially unharmed until overthrown by the great earthquake of A.D. 551, the most severe shock recorded for that region except that of 1870. This catastrophe destroyed the entire town as well as the sanctuary, and the site remained desolate and practically uninhabited for many centuries. The blocks of the upper half of the pillar of Nike fell toward the northeast, and the lower blocks were found on the slope below the original site of the monument. A few blocks between have been entirely destroyed, but as this part of the pillar at Olympia is preserved, it is possible to reconstruct them both with a fair degree of accuracy.

PERINTHUS.—A Bronze Head.—In *B.C.H.*, XLVIII, 1924, pp. 276–286 (3 figs., pls. IV–VII) P. de la Coste-Messeliere publishes a bronze head from Perinthus, now in the possession of M. Stamoulis at Athens. This head is a

replica of the same original as the so-called "Berenice" from Herculaneum, and now at Naples, as is proven by the illustrations, where the two heads are placed side by side. They are not, however, cast from the same mould, as is shown by certain differences in expression between the two. The particular value of the Perinthian head is due to the information it gives us concerning bronze technique of the Graeco-Roman period: for it is known that the head in Naples was considerably retouched and restored after its discovery. An examination of the interior reveals that it was cast in one piece by the sand process, and that it was cast separately from the body on which it was to fit. The patina is of the blue type, is very uniform in character, and is found in the interior as well as outside. It is a natural patina. After the casting, details were rendered by a very skilful use of the chisel, especially in the treatment of the hair. The writer is of the belief, however, that it can be established, from a comparison of the technique with that of the head in Naples, that the head was left unfinished by the sculptor. Finally the suggestion is made that there is nothing to prohibit the belief that these two heads are idealized portraits of a common original, and not necessarily, as has been previously suggested for the head in Naples, to be considered as Artemis or an amazon.

A Note on Two Satyrs.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, p. 251, J. Six emends a passage referring to two satyrs in Pliny, *N.H.*, XXXVI, 29. It should read *Satyri quattuor ex quibus unus Liberum patrem umeris praefert, alter Liberam, palla velatam, similiter*, etc.

The Statues of Aphrodite at Elis.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, pp. 222–228 (2 figs.), A. Schober points out that there were two statues of Aphrodite at Elis, one the cult statue of gold and ivory by Phidias, of which no copy has been known hitherto; the other a bronze statue by Scopas. He publishes two badly preserved statuettes in Vienna which he thinks are free copies of these works.

Two Bronze Statuettes of Apollo in Sofia.—In *Bulletin de l'Institut archéologique bulgare* I, 1 (1921–22), pp. 1–20, B. Filov discusses two bronze statuettes of Apollo which are preserved in the National Museum of Sofia. The first of these is of value as a work of art. It was discovered in 1901 in the ruins of an ancient building near Stara Zagora. It is a standing figure and apparently originally rested on its right hand, which is missing, upon a lost column. The left hand seems to have held a bow or a cithara, but this arm was broken and restored in ancient times. There is no definite parallel to the type, but the general style reminds us of several statues of the school of Praxiteles. Thus the head of the Apollo Sauroctonus is similar, and other resemblances point to relationship to the Apollo statue in the Palazzo Vecchio in Florence. It seems to be Hellenistic or an early Roman copy of a marble work of the school of Praxiteles.

The second statuette is of relatively little artistic value, but it shows marked similarity to the statue of Apollo represented on the coins of Antigonus Gonatas or Antigonus Dozon, and may be a reproduction of the same statue.

VASES AND PAINTING

An Early Helladic Gold Vase.—A vase of the "sauce-boat" type, of exceedingly thin beaten gold, with ring foot and the long open spout or nose, from which the shape is named, has been in the Louvre since 1887, and is said to have been found near Heraion, in western Arcadia. It is published by V. Gordon Childe in *J.H.S.*, XLIV, 1924 (pp. 163–165; fig.), with references to the various places where clay or stone vases of similar shape have been found and to the occurrence of early gold objects. It belongs to the Early Helladic culture of about 2600 B.C. and marks one point on the east-west route of trade and intercourse which extended from Asia Minor across the Aegean islands and as far as Sicily. Recent

discoveries in this "Helladic" culture, though still fragmentary, suggest that the mainland of Greece, in the third millennium B.C., was on an equal footing with Crete and the Cyclades in a great maritime confederacy.

Imagines Illustrium.—To his discussion of the sculptured portraits of Menander and others, F. Studniczka adds some studies of early Hellenistic painted portraits (Theocritus and the family of Demetrius Poliorcetes, both in later copies), in *Jb. Arch. I.*, XXXVIII/IX, 1923/24, pt. 1/2 (pp. 57–128; 2 pls.; 21 figs.). The epigram in which the Syracusan poet distinguishes himself from the orator, Theocritus of Chios:

Ἄλλος ὁ χῖος · ἐγὼ δὲ Θεόκριτος ὃς τάδ' ἔγραψα
εἷς ἀπὸ τῶν πολλῶν εἰμὶ Συρακοσίων,

was apparently the legend of a portrait-frontispiece on a copy of the poems, and this suggests that a similar contemporary miniature portrait may have been the original of a lively little mediaeval illustration in Ms. 2832 of the Bibliothèque Nationale at Paris, which is probably not earlier than 1250. Here the poet is shown presenting his poem The Syrinx, with a low bow to the god Pan. That the shape of the syrinx has been changed from the graded series of pipes to a short double flute, and the poet has been given a long-sleeved shirt to wear under his rustic exomis, while his laurel crown has become a close-fitting cap, still retaining the strings that bound it on, are inconsistencies which mark the rest of the composition as derived from tradition. The far from classic features of the poet perhaps explain why he was not made the subject of some more important work of art.

The paintings on the side walls of the large dining room of the villa of Boscoreale, each in three sections, of which the two remaining of the west wall are at Naples and the three of the east wall in the Metropolitan Museum in New York, have been interpreted as mythological subjects, but they are almost certainly historical. They show full-sized figures, somewhat damaged but full of individual character, which appear to be seated or standing immediately in front of the wall, two in each middle panel and one in each side panel. The middle group of the west wall is a harsh-featured young man seated out of doors, grasping a spear, and in front of him, also seated and looking earnestly and lovingly at him, a somewhat heavily developed older woman. The devices on the shield which stands between them, his cap with diadem, and other traits are those of a Macedonian king, undoubtedly Antigonus II, Gonatas, son of Demetrius Poliorcetes, and his mother Phila, a woman of distinguished character and ability. The elderly man in the left-hand panel, who wears the dress and staff of a philosopher, is one of the young king's teachers, perhaps Menedemus, while the missing right-hand figure may well have been his favorite mistress Demo, mother of his bastard son Halcyoneus. On the opposite wall, the central group is again a woman of mature years talking earnestly with a man. His figure, though much damaged, shows a powerful, maturely developed warrior, resting after a journey and divested of his accoutrement with the exception of the loosely worn chlamys. In this scene we have Demetrius himself, when, after the loss of his Macedonian throne and the death of Phila, he visited his sister Eurydice in Asia and arranged his second marriage with her daughter Ptolemais. Ptolemais herself is seen in the right-hand panel, looking back as she bears away the shield of the visitor, an epic service corresponding to his heroic nudity. The left-hand panel, facing the presumptive Demo, shows a handsome and carefully dressed young woman, seated and playing the cithar, — probably one of the famous courtesans of the time, Leaina or Myrina. The pictures were painted on the walls at Boscoreale probably about the time of Sulla, but they have the appearance of being copies from early Hellenistic originals. The style lies between the period of Lysippus and that of

the Pergamene sculptures, rather nearer to the former, while the historical connections suggest a date between the death of Phila in 288 B.C. and the rather late marriage of Antigonus to his niece Berenice in 276.

The Pottery of Naucratis.—Some hundred and sixty odd fragments of Naucratite pottery, chiefly in the British, the Fitzwilliam, and the Ashmolean Museums, with a few entire vases and a table of patterns, are published in *J.H.S.*, XLIV, 1924 (pp. 180–222; 7 pls., 63 figs.), by E. R. PRICE. She sketches the probable history of the ware, with its relations to the history of the city and to the wares of the founding cities of Naucratis, chiefly Rhodes, Miletus, Aegina, Chios and Clazomenae. In the earlier stages, the seventh and early sixth centuries, Rhodian influence was strongest; after the reorganization of the colony in 570 B.C., that of Clazomenae, and in the period of decline, Corinthian. Dominant characteristics of the ware throughout are the fineness of the technique, the use of a creamy white slip, and the dark painting of the interior of the vessels. The two main divisions chronologically, A and B, are distinguished, among other points, by the lack of incision in A. The very great majority of Naucratite vessels are flaring, two-handled cups, resembling the modern chalice, and like that, designed for ritual use. Great numbers of these cups together with pyxides and other shapes are found on temple sites in all parts of the Greek world, including Aegina, Sicily, and Russia, but almost none on the mainland of Greece. The not very common inscriptions are dedicatory, with one exception, *καλή εἰμι.*

Vase Fragments at Leipsic.—Of the collection of shards from Caere that were presented to the Antikenmuseum of the University of Leipsic in 1906, some which have not been fully published heretofore are pictured and described in detail by A. RUMPF in *Arch. Anz.*, 1923/4, Pt. 1 (cols. 44–95; 23 figs.). They include parts of five early Attic vases (pelicae and bowls), three Tyrrhenian amphoras, four Corinthian craters, three Laconian cylixes, a Caeretan hydria, and an Italian polychrome bucchero amphora. Four of the Attic vases represented are important both as examples of Athenian pottery at the beginning of the black-figure period (first half of the sixth century) and as evidence of the export trade of the period. Among them, a piece of a pelice showing the lower half of a running winged Gorgon is by the painter of the Netos amphora at Athens and of a cylix from Aegina now in Berlin. The Leipsic and Berlin pieces show unmistakable signs of the former existence of red and white paint, now disappeared, applied over the black glaze, and thus prove the continuity of this technique in Attica from Geometric times. Other pieces are among the best examples of animal drawing in this early period. A fifth vase, slightly later, is an example of the early black-figure pelice with reserved field. Of the Tyrrhenian amphorae, one has the departure of Amphiaraus on A, and on B, the introduction to Olympus of a woman, probably Pandora, led by Hephaestus and escorted by Hermes. Meaningless inscriptions with both pictures. No animal frieze. The departing warrior on a second of these vases may be an Amphiaraus, though some of the usual accompanying figures are absent. This vase, with three in the Louvre and one (unpublished) at Oxford, are by the same painter. The third amphora has a scene with Heracles and centaurs which is apparently a *contaminatio* of the Nessus and Dejaneira episode with the affair of Mount Pholoë. It shows a marked feeling for symmetry. Of the Corinthian craters (*vasi a colonnette*) the first shows cocks drawn in large scale and full detail; the second, with men on foot and riding, and sirens, has the surface and the original color effect in black, white and red, admirably preserved. A third shows fragments of Dionysiac dancing demons and a symposium; and the fourth, the unusual combination of a galloping quadriga in a combat scene. The last is one of a small group of craters, all by one hand, in which the body is widest near the top and tapers sharply down toward the foot,—a form common in Chalcidian and Laconian ware but exceptional in Corinthian. Of the three Laconian cylixes,

all of L. IV period, the first with a winged horse for device, without separate ground segment, is of especially delicate workmanship. The second has a scene including Zeus with the thunderbolt, perhaps a Gigantomachia, and a hippocamp in the lower segment. The third, with a picture of two youths dancing and playing the flute beside a huge crater, is of ordinary merit only. The fragments of a Caeretan hydria, already discussed by Loeschcke in 1894, show a garland of ivy leaves and berries on the shoulder, and of the main pictures, only a head of Achelous apparently in combat with Heracles from A, and parts of two deer from B, with lotus-palmette pattern beneath. The polychrome amphora, undoubtedly Italian, has been discussed by various writers since 1881. The decoration in white, red, blue, and green, covers the entire vase with stripes, bands, and conventional devices of many kinds, while the wide ribbon handles have animals in relief and gaily painted, walking on a vertical ground line. The shape of this amphora corresponds so closely to that used at Athens by Nicosthenes that it must be at least contemporary with his work, hence to be dated about 530–520 B.C.

INSCRIPTIONS

A Boeotian Inscription.—In *Rend. Acc. Lincei*, XXXIII, 89–92, P. Vinogradoff, replying to an article by Brandileone in *Rend. Acc. Lincei*, XXXII, 105 ff., discusses the light cast by a Boeotian inscription, published by Dareste, Haussoullier and Reinach, *Recueil des inscriptions juridiques grecques*, I, 276 ff., on the question as to whether there existed in Greek jurisprudence abstract contract-rights based on an *obligatio litterarum*.

Five Attic Decrees.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, pp. 123–171 (2 figs.), A. Wilhelm publishes the results of his study of five Attic decrees. 1. *I.G.*, I, suppl. p. 65, 35c, which Kirchhoff dated in 429–28, really dates from 411–10. *I.G.*, I 82 belongs to it. A restoration of the whole inscription is attempted. 2. In the decree in honor of Pythophanes (*I.G.*, II^2, 12) the early part of the inscription dates from the time of the Four Hundred and the later part from 399–98. 3. He discusses and restores *I.G.*, I, 87, I, suppl. p. 196, 116^5, *I.G.*, I, 106 and *I.G.*, I, 105, six pieces in all, belonging to the same decree. 4. He restores *I.G.*, I, 36 and I, suppl. p. 195, 116^2 to which *I.G.*, I, 74 also belongs. The decree dates after 427–26. 5. He restores the decree *I.G.*, II^2, 10A by which the men who came from Phyle and took part in the battle of Munychia were rewarded. It dates from 401–400 B C.

Greek Epigraphy in 1923–1924.—A summary of recently published articles and books dealing with Greek inscriptions, with indications of their contents and with mention of some new inscriptions, is published by M. N. Tod in *J.H.S.*, XLV, 1925, pt. I (pp. 102–119). The contributions are the work of scholars in England, France, Germany, Greece, Italy, the United States, and other countries. Among the important general works cited are: a new periodical in Latin, *Supplementum Epigraphicum Graecum* (*S.E.G.*), published at Leyden; the completion of the third edition of Dittenberger's *Sylloge Inscriptionum Graecarum*, with part 2 of volume IV, by F. Hiller von Gaertringen; a section on Greek Epigraphy in Gercke and Norden's *Einleitung in die Altertumswissenschaft*, by the same author; the epigraphic portion of Deissmann's *Licht vom Osten*, fourth edition, dealing with New Testament and early Christian material; a new edition of Cauer's *Delectus*, entitled *Dialectorum Graecarum exempla epigraphica potiora*, containing 834 complete texts and parts of others, with appendices on early Attic, colloquial, and barbarian inscriptions and ancient authors mentioning dialects; the small, very much improved, new edition, in one volume of *Inscriptiones Graecae* I (*I.G.*, $1,^2$) containing Attic inscriptions down to 403, a *Fasti Attici*, and excellent indexes, the work again of Hiller von Gaertringen, and Hoppin's *Handbook of B. F. Vases*.

There are numerous articles on the known examples of Minoan writing and on the origin of the Phoenician or Cadmeian alphabet, which bear directly or indirectly on the origin of the Greek alphabet. Special articles are classified geographically under Attica, Peloponnesus, and Central and Northern Greece. Among them may be mentioned: discussions of the oldest extant Attic inscription, ΤΟΤΟΔΕΚΑΝΜΙΝ, variously divided and interpreted; of the Erythraean and Phaselite decrees and the decree relating to Callicrates' building operations on the Acropolis; the archaic sculptured bases found in the Themistoclean city wall; the ostraka from the Ceramicus, written by forty-three citizens of Athens on a single day in a definite year, generally agreed to be 443 B.C., the year of the ostracism of Thucydides; decrees concerning the demes of Halimus, Cholargus, and Rhamnus, and a Saliminian thiasus; some material indicating that Philip V of Macedon was the son of Demetrius II; from Epidaurus, the constitutive act of the Hellenic League, of 302 B.C.; from Sparta, votives from the shrines of Orthia and Athena Chalkioikos; from Arcadia, epitaphs illustrating the formation of the Greek vocative; from Delphi, the inscriptions of the bronze Niké of Paeonius, the bronze charioteer, and the statues of Cleobis and Biton; matters relating to Delphian chronology and to the dates of Paul's stay in Corinth, and a Roman decree for the suppression of piracy, which may be the Gabinian Law of 67 B.C. or one in favor of Marius in 100–96 B.C.; at Thebes, four painted stelae, probably of warriors fallen at Delium in 424 B.C., and a decree in honor of some visiting artists who gave vocal and instrumental entertainments, ἀκροάσεις λογικάς τε και ὀργανικάς; from Thessaly, a discussion of the influence of different strata of population on the dialect; and scattered single finds bearing on local history, organization and dialects. [To be concluded.]

RHAMNUS.—An Unpublished Inscription.—In *B.C.H.*, XLVIII, 1924, pp. 264–275, (pls. II–III) FERNAND CHAPOUTHIER publishes a decree found, and still lying, on the western slope of the acropolis of Rhamnus. The inscription is dated by the forms of the letters in the third century B.C. At some later period it was used for other purposes, as evidenced by numerous chisel marks on the left side of the surface. A transcription, translation, and commentary of the stone is given. It is a decree in honor of a general named Apollodorus, appointed by the king Antigonus, and of an inspector Endios, appointed by the general: another decree in honor of this Endios is still extant (Wilhelm, *Beiträge*, p. 61). The king Antigonus can only be Antigonus Gonatas, who reigned at Athens from 262–61 till 240–39 B.C. It is held probable that this inscription belongs in the earlier part of his rule, and is not later than 256–55. If this date is correct, it is the only honorary inscription of the period actually extant. Its importance, therefore, as showing the organization of Macedonian rule in Attica is very great, and it also gives valuable information as to the officials of the Macedonian garrison at Rhamnus. The general was nominated by Antigonus, and confirmed by vote of the Athenian assembly; he was in command of a district; the inspector was appointed by him, and was the actual commandant of the garrison under him. Other points of the inscription are commented on, to show that even under the Macedonians, certain of the rights and privileges of the old Athenian democracy were maintained.

COINS

"Athens: Its History and Coinage before the Persian Invasion."—This book by C. T. SELTMAN (Camb. Univ. Press) is critically reviewed at length by E. S. G. R(OBINSON) in *Num. Chron.*, 1924, pp. 329–341.

GENERAL AND MISCELLANEOUS

An Athenian Festival of Parasols.—The original meaning of the Athenian women's mid-summer festival, from which the month Skirophorion took its name,

became somewhat obscured, even to the townspeople, as its character changed from a festival in honor of the Eleusinian divinities to one in which Athena was most prominent. A tradition survived that the *σκίρα* were parasols, and a number of vase-paintings dated about 600–550, together with references in Aristophanes, indicate that the festival was a sort of feminine Dionysiac counterpart of the men's Thesmophoria, in which women masqueraded with false beards and at least the priestesses carried sunshades. [E. Buschor, *Jb. Arch. I.*, XXXVIII/IX, 1923–24, pt. 1/2, pp. 128–132; fig.]

The Atlantic Tin Trade of the Greeks.—The scarcity of tin in Mediterranean lands makes it certain that the metal must have been obtained, from the beginning of the bronze age, either from central Europe (Bohemia and Saxony) by the old amber trade route, or from western Europe (Galicia in Spain, Brittany, and Cornwall) by sea routes extending outside the Pillars of Hercules or by land traffic across Gaul. The probable chronology of the use of these various western sources and routes, as inferred from passages in ancient writers and the evidence of the mines themselves and the distribution of coins, is sketched by M. Cary in *J.H.S.*, XLIV, 1924 (pp. 166–179). The mines in N. W. Spain were worked from very early times and again in the first century B.C. and later, being the chief source of tin during the Roman Empire. The deposits of South Brittany were worked about 500 B.C. Their product was used chiefly in western and northwestern Gaul and early in the fifth century they were superseded by those of Cornwall, which were still producing in the time of Julius Caesar and again after the third century A.D. The tin from Cornwall was collected in the island of Ictis, probably Mount St. Michael off the coast of Penzance, and exported from there. Direct traffic from Cornwall to Alexandria existed down to about 600 A.D. Tartessus in S. W. Spain was the great port of exchange for all Atlantic trade for some five hundred years, from about 1000 B.C. The first Greek navigator to pass the Pillars of Hercules was Colaeus of Samos, who was blown far out of his way to Egypt in 630 B.C. and brought back a cargo of Spanish silver. After that a regular trade with Tartessus was carried on by Phocaean merchants, and in the latter half of the sixth century, Midacritus of Phocaea was the first Greek to bring back a cargo of tin. He may really have gone to the land of its origin. The Straits were closed to trade, and Tartessus was destroyed by the Carthaginians about 500 B.C., but about 325 B.C., when Carthage was occupied at home by fears of an attack from Alexander, Pytheas of Massilia slipped through again and got as far as the stanneries of Cornwall. The conquest of Gades by the Romans in 206 opened this trade route again and it was used by Ῥωμαῖοι, probably Italiote Greeks, chiefly for the tin coming from Spain. As to the trade by land, the Greeks of the south coast of Gaul made little progress against the stubborn resistance to foreign intercourse of the native Ligurians and Iberians, but during the fifth century, when the sea route was closed and the more friendly Celts were penetrating Gaul, they began to establish connections with the Atlantic coast, and by the third century, they were obtaining tin by a Rhone-Loire route and probably also by a Rhone-Seine route to Le Havre or Boulogne—later the regular route for the entrance of lead from Britain and other northern products—and an Aude-Garonne route between Narbo and Burdigala (Bordeaux). Corbilo, near the mouth of the Loire, was the chief Atlantic port for the tin trade. It was destroyed about 50 A.D., probably when Julius Caesar crushed the great cross-channel trading nation of the Veneti.

DELOS.—Topographical Studies.—Under the title, "Recherches sur la Topographie du Hiéron Délien," C. Picard and J. Replat contribute an article (*B.C.H.*, XLVIII, 1924, pp. 217–263; 22 figs.) in which two questions are discussed. The first (pp. 217–247) deals with the original position of the famous colossal statue of Apollo, dedicated by the Naxians. Reference is made to the researches

of Courby (*B.C.H.*, XLV, 1921, pp. 174–241: see *A.J.A.*, XXVII, 1923, pp. 199–200) who believes that the present foundation of the colossus was its original position, and that Plutarch is in error when he states that the bronze palm-tree set up by Nicias in 417 B.C. fell on the statue of the Naxians and overturned it. The writers of this article argue for an original position for this statue about twenty-nine metres west of the present foundation. The exact position of the palm-tree of Nicias is known, as its base, identified by part of the dedicatory inscription, has been discovered. The evidence afforded by the mediaeval travelers, and especially by Cyriac of Ancona, shows that already before 1420 the base of the Naxian Apollo was in its present location. But the blocks of this base yield proof that at some period it was moved from an earlier position. The suggestion is then made that the colossus originally occupied a foundation still existing, about ten metres to the west of the palm-tree of Nicias, and in front of the colonnade of the Stoa erected by the Naxians in the middle of the sixth century B.C. This foundation goes back to the archaic period. In the third century B.C., there is evidence, from the letter-forms of the present dedicatory inscription, that a restoration of the statue was made, presumably after it had been overturned by the palm-tree, and probably in its original position; while at some unknown later period it was moved to its present location. This suggested earlier location, in such close proximity to the palm, tends to vindicate Plutarch's veracity. The second question (pp. 247–263) is in regard to the tombs of the Hyperborean Virgins, mentioned in the Fourth Book of Herodotus, where their position in relation to the sanctuary of Artemis is plainly indicated. Trial excavations about four and one-half metres to the south of the previously identified Artemisium revealed, at a depth of a metre from the present surface, a platform, facing west, about six metres in diameter, cut in the living rock. It is proven that this was an *abaton*, left open to the sky. The outer walls, which were probably of the Hellenistic period, have completely disappeared. The finds of sculpture and pottery associated with this place include a large male head of archaic workmanship, the front part of the torso of a Sphinx, somewhat resembling the so-called Sphinx of the Naxians at Delos, and the Sphinx of Sparta, and sherds going back to the Cycladic civilization, showing resemblances to Cretan wares of the second Middle Minoan period, or even earlier. The writers identify this place on account of its antiquity with the site of the double tomb of Hyperoche and Laodice, confirming the statement of Herodotus that it was behind the sanctuary of Artemis. The article ends with a discussion of the exact location of the earliest temple to that goddess, no definite conclusion being reached, but postponed for a future paper.

Gold Bead-seals and Signet Rings from Thisbe, Boeotia, and "Nestor's Ring" from Pylos.—In publishing for the first time thirteen remarkable engraved gold seals found in 1915, with other objects, in a Mycenaean rock-cut chamber tomb near the site of ancient Thisbe, in southern Boeotia, and the so-called "Ring of Nestor" found in 1907 in one of the great bee-hive tombs at Triphylian Pylos, which Dörpfeld identifies with the Pylos of Nestor and the Odyssey, ARTHUR EVANS makes their designs the basis of a wide-reaching comparison and study of other Minoan and Mycenaean works of art (gems, seals, frescoes, weapons, etc.) and finds in them important evidence as to the religious ideas and practices of the ancient Cretans. The treasure of Thisbe consists of a larger and a smaller seal ring, apparently belonging to the royal couple interred here; eight amygdaloid or sub-oval bead seals with bevelled backs, three of which are very large (37 mm. long) and with full-rounded surface, while the other five (22 mm.) are flatter; and three bead seals of the earlier, "flattened cylinder" type, of solid make and with rectangular field. The intaglios give the correct relation of right and left hands in such actions as drawing the bow and holding reins or weapons, which is reversed in the impressions. The oval seals are of one epoch, about 1500 B.C., and the five

smaller probably by the same hand. The subjects include episodes of the bull-ring, lions seizing their prey, religious scenes, and incidents from an heroic cycle. The three older pieces, dating from the early part of the sixteenth century, show a nude youth who has missed his spring in the bull-grappling test and fallen under the feet of the animal; the ritual sacrifice of a bull by a man wearing a long, knotted fillet with star-shaped ends; and a lion seizing a galloping bull. The religious character of the taurokathapsia is shown by the presence on the background of the first scene of the sacral knot, a fringed scarf knotted into a loop and sometimes, as here, shown double. These sacral knots appear on the shoulders of the Minoan goddess and her votaries, and are probably the source of the shoulder wings of Greek art, while the side wings are of Egyptian origin. The second scene shows the sequel to a successful performance of the difficult and dangerous bull-vaulting act, where the initiate, wearing priestly regalia, sacrifices the bull which he has encountered. In the third scene, rings around the forefeet and ankles of the lion indicate that he has been kept in captivity for the purpose of this contest. The design on the larger signet ring, a lion seizing a fallow deer, shows a distinct advance in composition and execution over the earlier lion scene. The smaller ring has a religious scene, in which a seated goddess, wearing a triple crown, with a seated adult attendant and two young girls, is engaged in dropping poppy seeds into the ground, as a rite of fertility. All four wear the familiar Minoan flounced skirt and tight-fitting, short-sleeved bodice which exposes the breast of the older women. Wavy lines at the top represent the sky and indicate the celestial character of the chief personage. A rayed orb and crescent, for the sun and moon, sometimes are included by such sky lines and sometimes from lack of space, occur without them. The two child companions of the goddess occur in many other representations, and may be taken as her daughters, διάσκουραι, the prototype of the Dioscuri who attended Zeus when he had usurped the place of his mother. One of the smaller bead seals shows the same goddess, with triple headdress, as Lady of the Underworld. Holding poppy capsules, like her later representative Persephone, and with snakes about her neck, she is rising out of the ground between sprouting palm plants, while an elegant youth hastens to assist her. His courtly manner and elaborate costume, with tasselled fringes hanging from his headdress and the short sleeves and trousers of his tunic, suggest a priest-prince of the royal house performing a rite for the arrival of spring. On another bead seal the goddess with one of her little companions assists at a ceremony for producing rain, in which the adult attendant standing before a tree or vine, pours a liquid from a one-handled jug into a large jar, both the vessels being of metal. This is a not uncommon rite for bringing rain and is sometimes represented merely by a two-handled goblet, the sun, and a plant. On a third of these seals, the goddess as Britomartis or Dictynna is discharging an arrow into the neck of a fleeing stag, again the fallow deer of Crete, with palmated antlers. Like Artemis in Hellenistic art, the goddess is turned partly round so as to show the quiver on her back and the strap by which the sheath of her hunting knife is hung. A fourth seal has the goddess between two swans which she holds at arm's length by the neck, a motive familiar in later art. The other four seals show the adventures of the fashionably dressed young prince of the spring scene, with a spear attacking a fierce lion in its den; with a short sword or dagger charging a vigorously resisting sphinx; with bow and arrow in combat with an older man who shoots from a chariot (all these encounters taking place in wild, rocky surroundings); and lastly, surprising a pair of guilty lovers, of whom he has given the man a mortal wound and is starting in pursuit of the woman, who tries to flee, half paralyzed by fright. The last three scenes, on the three larger seals, seem to anticipate by many centuries the story of Oedipus and that of Orestes slaying Aegistheus and Clytemnestra. The "Ring of Nestor," with other relics found in

the same tomb, belongs to the transition period between MM III and LM I, the early part of the sixteenth century B.C. It is a funeral pendant, made only for suspension, as the ring is too small for a finger. An intermediate stage in the development of the ring seal from the bead seal is found in an early Minoan cylindrical signet or tubular bead, which is fashioned of ivory after a metal prototype and has the oval bezel set parallel with the axis. The large oval field of the "Nestor" ring presents an epitome of Minoan eschatology, containing no less than sixteen figures. It is divided into four compartments by the trunk and two leafless lateral branches of a huge and ancient tree, which, though it has oriental connections, can best be likened to the Ash Yggdrasil, the Tree of the World, of Scandinavian mythology. On its spreading roots lies a hound, perhaps an early Cerberus, with but one head. In the upper left hand section the goddess and her companion are seated in animated conversation, while above their heads are two fluttering butterflies and the two chrysalids from which they have just emerged, and to the right, next the tree trunk, a young woman is joyfully welcoming her lover, united to her again in the Afterworld. On the other side of the tree an enormous (comparatively) lion, as guardian of the Nether World, lies on a three-footed couch, shaded by the sacral ivy, and the two little Diascurae attend him. Many instances are at hand of the lion as guardian of the dead and companion of the Minoan goddess, later Rhea, in her chthonic aspect. The space below the spreading branches of the tree forms one continuous scene passing behind the trunk. At the right, seated on a high throne or altar and facing the left, is a griffin, the other familiar associate of the Minoan goddess, who stands behind him here. In front two griffin-headed ladies bring him offerings, while two others are conducting to him the happy pair of the upper scene. Here they are seen, again to the right of the tree, climbing joyfully up over its rough roots, the man leading his bride by the hand, while one of the strange beings beckons to them from the other side, and the other one, at the left, warns away another youth, deemed unworthy to share in the rite of initiation. All the female figures in these scenes wear the very short skirts that were the fashion in Crete in the early LM I period, and the young man wears only the loin clothing, in marked contrast to the elaborate finery of the hero of Thisbe. Both series of pictures, in their animation and emotional expressiveness, seem to refer to something more definite than an abstract symbolism, and we may note that both Minoan Crete and the Thrace from which come the stories of Orpheus and Protesilaus, touching both sides of the grave, had connections on different sides with the Anatolian world of ideas. The "Nestor" composition gives us the first glimpse into the World of the Hereafter, as conceived by the Minoans. In style and character it so closely resembles the miniature frescoes of the Cnossian palace as to suggest an original in that medium, and an attempt has here been made, on a colored plate, to give it that effect. (*J.H.S.*, XLIV, 1925, pt. 1, 1–75; 5 pls., 1 colored; 57 figs.).

Small Greek Antiquities.—In *B. Metr. Mus.*, XIX, 12, 292–296 (6 figs.), G. M. A. R(ICHTER) discusses a group of small, dainty articles recently acquired by the Museum. The collection includes eight stone vases, cups and bowls, a ladle, and a jug illustrating the Cretan art of carving stone vases, an art traceable to Egypt and which was supplanted by pottery and bronze work. From Crete also came a fine bronze double axe, a primitive bronze female statuette in the attitude of adoration, a fish-hook of the same shape as the one used to-day, and a hematite celt of the Stone Age, proving that Crete was inhabited in Neolithic times. Dark blue glass ornaments of the Late Minoan period in the form of curls and spirals with holes for stringing are identified as having formed a head decoration. Another set of light blue glass ornaments with holes for stringing are also explained as having been used as a straight band or diadem. An archaic Greek terracotta

frieze shows sphinxes and chariots arranged in repeat. Archaic Greek art is further illustrated in four terracotta moulded vases, two in the form of male heads, one in the form of two female heads arranged back to back, and the fourth in the form of a foot with sandal, fine examples of their types. A small terracotta egg may be a loom weight. A female head, the upper part of a terra-cotta doll, and the head of an elderly man in relief, from Memphis, are additional examples of Greek terracotta work. A helmet-shaped lamp is a piece of Roman terracotta. A small head of a youth 5.1 cm. h. belongs to the late archaic period. It is not broken off from a statue but is finished off at the bottom and possibly had been placed upon a staff. Three bronze statuettes of good quality are a dancing Satyr 11.4 cm. h., a small Roman boy 10 cm. h., and a Lar with drinking horn and patera 12.9 cm. h. Also some remains of a small marble statuette are included, four attractive heads showing a youth, an Apollo, a Heracles, and a man with parted hair like that of the younger Faustina and belonging to the second century A.D.

ITALY

SCULPTURE

A Roman Relief in Vienna.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, pp. 229–250 (3 pls.; 9 figs.), J. Zingerle publishes a rudely cut Roman relief found behind the arsenal in Vienna in 1891. It is interesting because it represents the combat between Heracles and Cycnus, a rare subject in reliefs. It dates from the third century A.D.

The Stucco Reliefs of the Underground Basilica near the Porta Maggiore.—In an article by E. Strong and N. Joliffe, in *J.H.S.*, XLIV, 1924, pt. 1 (pp. 65–111; 3 pls., 17 figs.), a brief account of the basilica itself is followed by a description of the subjects and eschatological symbolism of the reliefs with which the entire interior of the building except the mosaic floors is covered, and their connection with Greek and other mystery religions, with frequent references to the use of similar motives on tombs, sarcophagi, and monuments in Italy, the Rhineland, and elsewhere. The building dates from the first century A.D., probably from the reign of Claudius, and is the first complete evidence of the pre-Christian religious use of the basilica form, with nave, aisles, barrel vaulting, apse, and square atrium, on an east and west axis. It is a real hypogeum, constructed from above, the walls and piers being made by pouring concrete into deep trenches and pits dug in the solid earth, which served also before removal, as a mould for the concrete arched roof. A descending corridor along the outside of the north wall, with a light well, leads to a door in the side of the atrium, but its upper entrance has not been found. Daylight and air came only through an open shaft in the ceiling of the atrium over an impluvium. This was evidently the secret place for meeting, worship, and initiation of a wealthy and cultivated sect of neo-Pythagoreans. There are traces of an altar, a throne in the apse, chains for the suspension of lamps under the arches, and stands of some sort before the pillars, but as no articles of any kind have been found in the earth which filled the hall to two-thirds of its height when discovered in 1917, the place must have been abandoned deliberately and all furniture removed, perhaps after no long use. In the atrium the stucco is partly in color and partly in relief, but in the main hall, gleaming white and covered with reliefs in friezes and panels of various shapes. The subjects, of which at least one hundred and seventeen have been counted, are scenes and figures of mythology, ritual, and everyday life, all having symbolic meaning and combining to give a complete picture of the progress of the soul to union with Divinity in the Afterworld. Among the stories of mythology here used to teach religious truths or as symbols of death, purification, the voyage of the soul, entrance into a new world, or the contrasted lots of initiate and uninitiate, are

the Rape of Ganymede and of the two Leucippids, Jason at Colchis and Heracles with a Hesperid, Orpheus and Eurydice, Heracles rescuing Hesione and Alcestis, Orestes and Iphigenia with the Palladium, the sacrifice of Iphigenia, Electra and Orestes, the Apotheosis of Heracles, Demeter and Triptolemus, Phaedra and Hippolytus, Apollo and Marsyas, while Achilles with the Centaur, a marriage, children's games, the palaestra and schoolroom, represent the training and preparation of the soul in this life. There are scenes of divination, magic, and initiation, ecstatic dances of maenads (the initiate) and mourning Danaids (the uninitiate), erotes, victories, griffins, sphinxes, orantes with outspread arms (perhaps personified figures of Attis), Egyptian scenes with pygmies, scenes with the liknon or vannus, the phallus, the lyre, a flaming altar, a serpent, a key, the vase of life, and many other sacred objects. On the walls is a series of landscapes and sacred groves with trees, pillars, and statues, usually female, in enclosures. In the apse is a sort of Last Judgment. Over a stormy sea, the soul, as a woman closely veiled, steps down from a rocky promontory on the right, gently pushed on by an Eros, while before her a Triton holds out a sheet folded boat shape, as if to receive her. Opposite and above, Apollo holds out a welcoming hand, while below him sits a dejected male figure, probably typifying the uninitiate. This scene, with which the story of Sappho and Phaon may be compared, is a reminiscence of ordeal and purification by water and by air.

Studies in Roman Portraiture.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, pp. 172–202 (22 figs.), A. Hekler points out that a criterion for dating Roman portrait heads is to be found in the historical reliefs which extend in an almost unbroken series from Augustus to Marcus Aurelius. Further evidence may be found in the treatment of the hair and the shape of the bust. With these points in mind he attempts the identification of several Roman portrait heads.

COINS

Hoard of Roman Coins from Plevna.—In 1922 a Bulgarian peasant digging in his vineyard near Plevna uncovered an earthen pot containing 4033 *denarii* and *Antoniniani*. Of these, 3296 have been examined at the British Museum. They range in date from Domitian to Hastilian. The largest number of a single reign was 1173 *Antoniniani* of Decius. Questions of mints, types, and titles, and the bearing of the newly disclosed facts on the history of the times, are carefully discussed by H. Mattingly and F. S. Salisbury in *Num. Chron.*, 1924, pp. 210–238 (2 pl.).

Romano-Campanian Coinage and the Pyrrhic War.—H. Mattingly adds to his remarkable services in the reconstitution of our history of Roman coinage by an article with this title in *Num. Chron.*, 1924, pp. 181–209 (pl.). It has been customary (with Mommsen) to assign Romano-Campanian coinage to a Capuan mint, and the period soon after 340 B.C. This is untenable. Apart from a few issues of yet later date, it is all of the period of the war with Pyrrhus (282–272 B.C.), when Carthage was friendly to Rome, and furnished probably bullion and certainly some types. This new dating affects also our judgment of certain other problems of early Roman coinage. The libral *as* at Rome was probably not coined earlier than about 300–290 B.C. Its weight fell more or less gradually. Perhaps the semissal standard dates from 268 B.C., when the *denarius* was introduced. Between 268 and the end of the First Punic War it fell to a sextantal standard. Silver played little part in coinage at Rome till the Second Punic War when the *denarius* was issued in mass and became predominant in Italy, the way to its supremacy having been paved by the *quadrigatus* and *victoriatus* of the southern coinage.

Unpublished Coins of Magna Graecia.—A. H. Lloyd publishes twenty-one

coins from his collection. They pertain to various cities of Magna Graecia. None of them are unique, but they contribute toward more precise knowledge of the issues concerned (*Num. Chron.*, 1924, pp. 129–140; 2 pl.).

GENERAL AND MISCELLANEOUS

Metulum and Fluvius Frigidus.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, Beiblatt, cols. 479–494 and 507–510, G. Veith defends against W. Schmidt and K. Pick his identification at Metulum as the modern Viničica, and the site of the battle of Theodosius at the Fluvius Frigidus as being at Duplje. *Ibid.*, cols. 495–507, W. Schmidt urges objections to these identifications.

Prosopographical Notes.—In *Jh. Oest. Arch. I.*, XXI–XXII, 1924, Beiblatt, cols. 425–478, E. Groag publishes prosopographical notes on Sergius Octaevius Laenas Pontianus, Sex. Quinctilius Valerius Maximus, and M. Plantius Silvanus.

EARLY CHRISTIAN, BYZANTINE, AND MEDIAEVAL ART

EGYPT

Early Christian Weavings from Egypt.—In *B. Metr. Mus.*, XX, 2, 55–58, Maurice S. Dimand discusses a group of woolen stuffs illustrating the art of weaving in late Roman and early Christian times. The early Christian art freely depicted scenes from the life of Christ both on tapestry and silks. Fragments of a woven band, probably at one time the border of a garment which may have been worn by a priest, are assigned to the fifth or sixth century. In these pieces the scenes show: the Annunciation, the Nativity, Bathing, the Adoration of the Shepherds. Textiles woven by the draw-loom method were associated by Pliny with Alexandria, and are called *polymita*. Rome and Egypt did not know this method before the first century B.C., though China practiced it long before. The expensiveness of silk explains why at first wool was employed in draw-loom weavings.

BULGARIA

Bulgarian Funeral Churches.—In *Bulletin de l'Institut archéologique bulgare* I, 1 (1921–22), pp. 103–135, A. Grabar describes three Bulgarian churches, one at Bachkovo, the second at Boyana and the third near Stanimaka, of which the first and second are definitely known to be mortuary churches and the third approaches the same type. They are two stories in construction and the lower story was used for the departed while the upper served as a chapel for the requiems. In their shape and form they approximate the two-storied Armenian churches described by Strzygowski, and in many details they represent an even more archaic stage, since the former, at least, dates from the eleventh century. The author lists distinct Caucasian, Armenian, and Georgian borrowings in this church, and shows how these tendencies exist along with distinct marks of Constantinople construction.

The Nature and Development of Bulgarian Religious Architecture.—In *Bulletin de l'Institut archéologique bulgare* I, 2 (1921–22), pp. 186–205, Andre Protitch describes the different types of Bulgarian churches known to us and finds three distinct types: The first type is the Bulgarian basilica (ninth to the twelfth century) representing the great basilica, long and elaborate, largely influenced by Anatolian and Armenian traditions. The second type (end of the ninth to the fourteenth century) is the small semi-basilica with a dome. This type was produced under Byzantine and Salonica influences and sought for an impression of intimacy rather than grandeur. Height predominates over length. The structures are very varied, since many of them were burial chapels. The most widespread type has three aisles and a transept with columns and pillars or a dome

and tower. The third type (fourteenth to the nineteenth century) is influenced by the basilicas of Mount Athos and was developed really after the seventeenth century. The best example of this type is now the Church of St. John at Rilo from the first half of the nineteenth century, and this furnishes the model for many modern Bulgarian churches.

PATLEJN.—History of the Establishment of the old Bulgarian Monastery.—In *Bulletin de l'Institut archéologique bulgare* I, 2 (1921–22), pp. 146–162, V. N. ZLATARSKI takes up the various accounts preserved concerning the Monastery near Patlejn in the neighborhood of Preslav, and concludes that there was a fortress on this site from the date of the foundation of Preslav, 821. This was turned into a monastery by Tsar Boris, who became a monk in 889 and died here. After the Hungarian invasion of 895, in which the church was ruined, Tsar Simeon restored it between 896 and 906. The monastery seems to have been dedicated to St. Pantaleimon, and hence gave the name Patlejn to the surrounding region. The author supposes also that here was the seat of the earliest Slav-Bulgar literary school of the pupils of Methodius. Despite its importance the monastery was pillaged at the end of the tenth century and was not restored.

RENAISSANCE ART

GENERAL AND MISCELLANEOUS

A Collection of Pewter Ware.—In *B.A.I.*, XIX, 4, 42–45, H. S. discusses a collection of pewter in the Art Institute including a considerable variety of articles, some of them rare and beautiful specimens of the last three centuries. A paten in the Renaissance style belongs to the late sixteenth century and was probably made at Nuremberg. In its centre is depicted the Resurrection. The border has a series of medallions with the Twelve Apostles. Pewter, because of its cheapness, often was substituted for gold and silver in ecclesiastical articles as well as in secular ware. The articles in this collection belong mainly to the eighteenth century. There is a fine Scottish communion set dated 1794. Design and form are well executed in lamps, ink-stands, jugs, drinking vessels, and sets of measures. Pewter ware declined with the appearance of cheap pottery in the nineteenth century. Its use continued in the rural communities. American pewter followed English standards.

ITALY

Portraits by Parmigianino.—In *Burl. Mag.*, XLVI, 1925, pp. 87–93 (2 pls.), L. FRÖHLICH-BUME publishes some portraits by Parmigianino which he omitted in his monograph on the artist. Most important among them is one which is probably to be identified as the likeness of Isabella d'Este. Here Parmigianino shows his careful, beautiful technique at its best.

GREAT BRITAIN

Lost Fifteenth-Century Tapestries.—In *Burl. Mag.*, XLVI, 1925, pp. 35–42 (3 pls.), H. C. MARILLIER discusses the tapestries which hung until 1800 in the Painted Chamber, Westminster. At that time, almost wholly unappreciated, they were stripped from the walls and sold for next to nothing, to vanish soon from all knowledge. A protest published by an architect in the *Gentleman's Magazine*, 1799, and a series of drawings by the same author (recently acquired by the Victoria and Albert Museum) give us a very good idea of some of the pieces. The principal subject was the "Great History of Troy," based on the late twelfth-century *Roman de Troie* of Benoît de Saint-More. The date of the tapestries was the late fifteenth century. Other sets representing the same subject are here discussed.

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